ORDER NO. MTV9707056C3

Service Manual

Colour Television

TC-21L100R
TC-21W2
TX-21W2T

MX-5 Chassis

Specification

Power Source :	AC 110-240V, 50/60Hz
Power Consumption :	98W
Aerial Impedance:	75Ω unbalanced, Coaxial type
Receiving System :	17 System
Receiving Channels :	
VHF	1-11 PAL B (Australia & N.Zealand) 1-12 (PAL/SECAM D) 1-12 (NTSC M JAPAN) 2-12 (PAL/SECAM B,G) 2-13 NTSC M U.S.A
UHF	21-69 PAL G I/SECAM B,G,K1)28-69 PAL G (Australia) 13-56 PAL D13-52 NTSC M JAPAN14-69 NTSC M U.S.A.
CATV	S1-S41 (Hyper)
Intermediate Frequency :	
Video	38.0 MHz
Sound	31.5 MHz (D,K,K1) 32.0MHz (I) 32.5 MHz (B, G) 33.5MHz (M)
Colour	33.57 MHz (PAL)33.6 MHz (SECAM) 33.75 MHz (SECAM)34.42 MHz (NTSC)

Receiving Stereo Sound System :	AV STEREO / TEXT
Video / Audio Terminals :	
FAV In	Video In 1 Vp-p 75Ω Audio In Approx. 400mVrms
RAV In	Video In 1 Vp-p 75Ω Audio In Approx. 400mVrms
Monitor Out :	Video Out 1 Vp-p 75ΩAudio Out Approx. 400mVrms
High Voltage :	28.5 kV (+1.2, -1.5)at zero beam current
Picture Tube :	A51JXS064X 54 cm (21 inches)Measured diagonally, 90° deflection
Audio Output : Speaker :	5.0W 8Ω
Dimensions :	Height : 530.6 mmWidth : 580.0 mmDepth : 486.0 mm
Mass :	22.0 kg (Net Wt.)
Remote Controller :	27 Functions infrared controller 38 Functions infrared controller

Specifications are subject to change without notice. Mass and dimensions shown are approximate.

Panasonic®

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

CONTENTS

Page

1 Safety Precautions ---- 3
1.1. General Guide ---- 3
1.2. Leakage Current Cold Check ---- 3
1.3. Leakage Current Hot Check (See Fig. 1) ---- 3
1.4. X-Radiation ---- 3
1.5. Shut Down Circuit Test ---- 3
2 MX-5 Chassis Block Diagram ---- 4
2.1. The I2C Bus Concept : ---- 4
3 Service Hints ---- 4
3.1. Service Position for E-Board ---- 4
3.2. Purpose of Hotel Mode ---- 5
3.3. How to set the Factory Mode for adjustment ---- 5
4 Adjustment Procedure ---- 6
5 CONDUCTOR VIEWSE-BOARD TNP4G066AG-TNP4G066AA ---- 13
6 TEST POINT WAVEFORMS ---- 15
7 BLOCK DIAGRAM FOR INTEGRATED CIRCUITS ---- 16
8 Schematic Diagram for models TC-15PM10R (MX-7 Chassis) ---- 17
9 Schematic 1 ---- 21
10 Replacement Parts List ---- 27

1 Safety Precautions

1.1. General Guide

1. It is advisable to insert an isolation transformer in the AC supply before servicing this hot chassis.
2. When servicing, observe the original lead dress, especially the lead dress in the high voltage circuits. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
3. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers, shields, and isolation R-C combinations, are properly installed.
4. When the receiver is not to be used for a long period of time, unplug the power cord from the AC cord outlet.
5. Potential, as high as **29.7** kV. is present when this receiver is in operation. Operation of the receiver without the rear cover involves the danger of a shock hazard from the receiver power supply. Servicing should not be attempted by anyone who is not thoroughly familiar with the precautions necessary when working on high voltage equipment. Always discharge the anode of the picture tube to the receiver chassis before handling the tube.
6. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.2. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Turn on the receiver's power switch.
3. Measure the resistance value, with an ohmmeter, between the jumper AC plug and each exposed metallic cabinet part on the receiver, such as screw heads, aerials, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between **4 MΩ and 20 MΩ**. When the exposed metal does not have a return path to the chassis, the reading must be infinite.

1.3. Leakage Current Hot Check (See Fig. 1)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 2kΩ, non-inductive resistor and an AC/DC current meter, in series with each exposed metallic part on the receiver in turn and an earth such as a water pipe.
3. The current from any point should not exceed 0.7 mA peak AC or 2mA DC. In the case of a measurement being outside of the limits specified, there is a possibility of a shock hazard, and the receiver should be repaired and rechecked before it is returned to the customer.

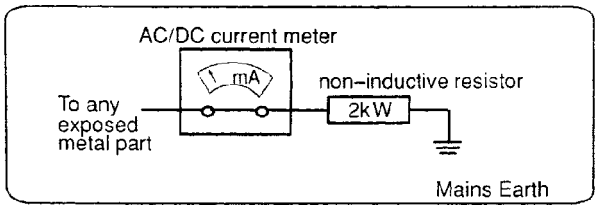


Fig. 1 Hot-Check Circuit

1.4. X-Radiation

Warning :
The potential sources of X-Radiation in TV sets are the EHT section and the picture tube.

When using a picture tube test rig for service, ensure that the rig is capable of handling 29.7 kV without causing X-Radiation.

Note: It is important to use an accurate periodically calibrated high voltage meter.

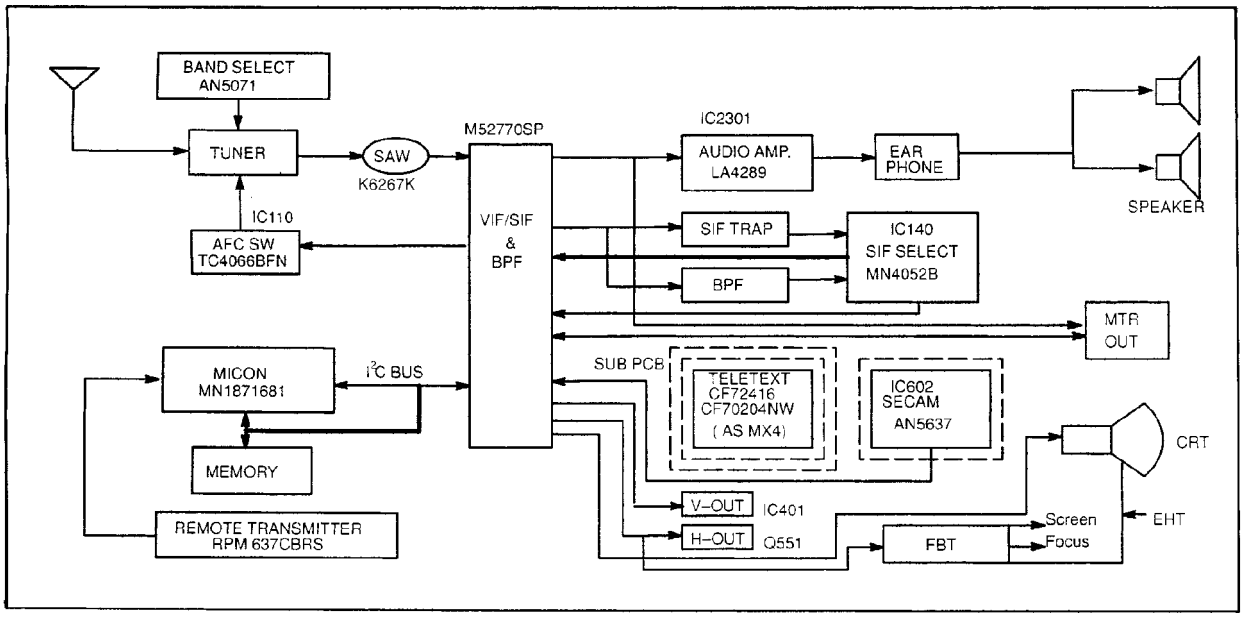
1. Set the brightness to minimum.
2. Use the remocon to get into SERVICE mode. (Refer to Pg. 6)
3. Measure the EHT. The meter reading should indicate **28.5 (+1.2, -1.5) kV**. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
4. To prevent the possibility of X-Radiation, it is essential to use the specified picture tube, if service replacement becomes necessary.

1.5. Shut Down Circuit Test

This test must be made as a final check before the set is returned to the customer.

1. Operate the TV set.
2. Set Controls:
   Screen (on FBT) ..... minimum
   Contrast..... minimum
   Colour..... minimum
3. Connect a DC voltmeter to cathode of D591, and confirm that the voltage reading is 24.1 V or less.
4. Supply 25.3 V DC to cathode of D591 and confirm that the shut down circuit does not operate.
5. Supply 27.94 V DC to cathode of D591 and confirm that the shut down circuit operates.
6. Switch the set off and disconnect the DC supply. Switch the set on and Normalize the contrast and colour.

2 MX-5 Chassis Block Diagram



2.1. The I²C Bus Concept :

A. Features

1. The I²C bus is a 2-wire serial bus consisting of a clock line (SCL) and a data line (SDA).
2. It allows bi-directional data transfer between ICs.
3. It consists of a master and one or more slave ICs.
   - The master initiates transfer and generates clock signals.
   - The slave is the IC addressed by a master. It allows bi-directional data transfer between ICs.

3 Service Hints

3.1. Service Position for E-Board

1. Remove the back cover.
2. Stand the TV set as shown in fig. 7.
3. Remove the E-Board from the TV set by pulling the main board out as shown in fig. 7.

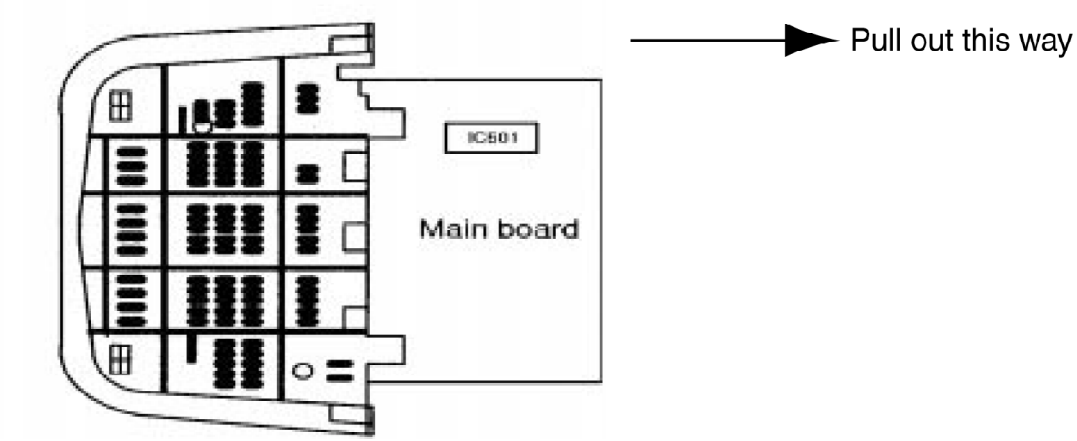


Fig. 7

3.2. Purpose of Hotel Mode

To limit the level of main functions of TV such as Volume, Brightness, Tone, Sharpness, Colour and Contrast for hotel use.

How to Set — To set the hotel mode, press VOLUME 15 DAC on the TV and TIMER SETTING 30 MIN on the remote control and press channel up on the TV and press recall on the remote control in the same time simultaneously as shown in figure 8.

How to Cancel — To cancel the hotel mode, press VOLUME (-) DOWN on the TV and OFF-TIMER on the remote control simultaneously as shown in figure 8.

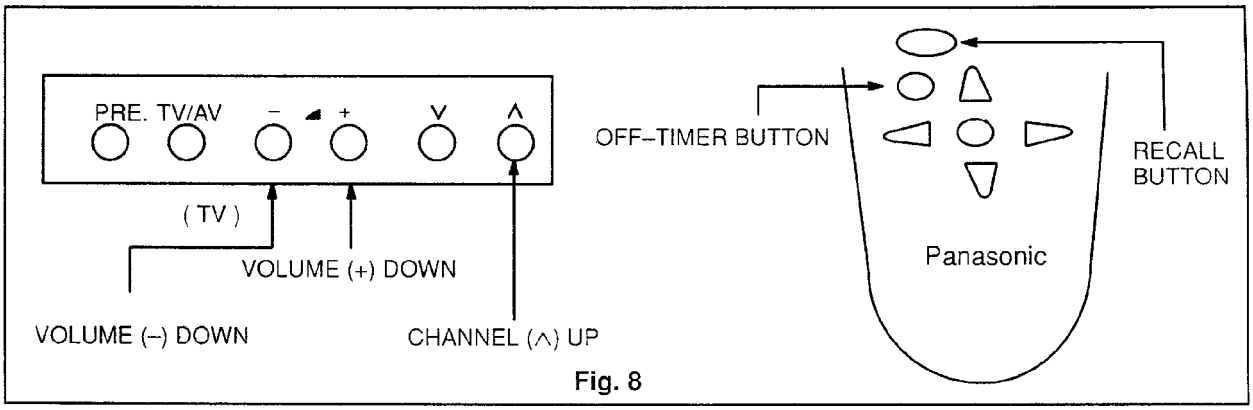


Fig. 8

3.3. How to set the Factory Mode for adjustment

Follow the steps shown in the block diagram below to set the Factory Mode for sub-colour; sub-bright, sub-contrast; RGB low-light and RGB high-light adjustments and return to Normal mode after adjustment.
When the IC601 (VCJ) or IC1104 are replaced, these adjustments must be done as below.

3.3.1. The Sub Adjustment mode

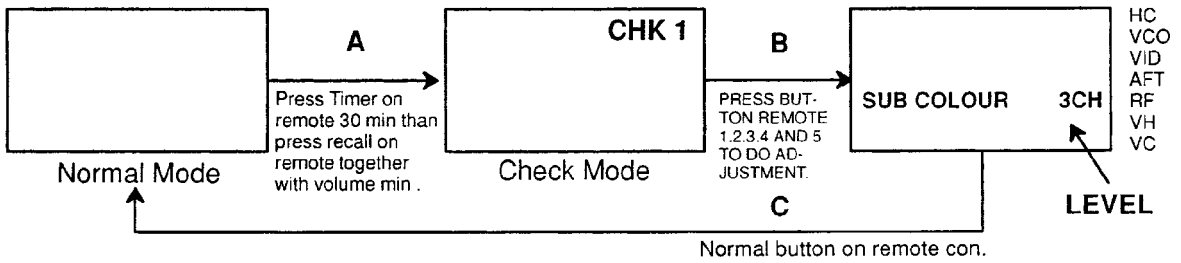


Fig. 9

A: Press the Timer button setting 30 min then press Recall button together with volume down. Vol must be "0" dac.
The TV in the Normal mode change to check mode. "CHK" will appear on the screen as shown in Fig. 9.

B: Press button Remote 1,2,3,4 and 5 to select the required adjustment to be adjusted as shown in Fig. 9.
Press the Volume "up" or "down" button to change the level.

C: Press the Normal button on the remote control transmitter twice to return to Normal mode.

3.3.2. The CRT Adjustment mode

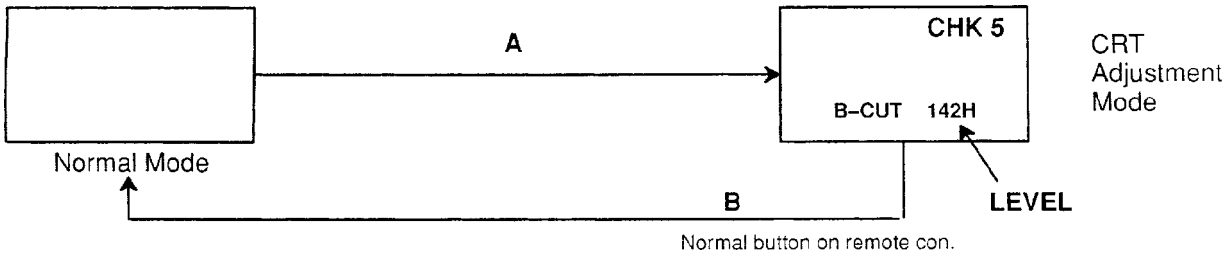


Fig. 9a

A: Press the Timer button setting 30 min then press Recall button together with volume down. Then press button remote to select "CHK 5". The TV in the Normal mode changes to the CRT Adjustment mode.
Press the remote button volume up or down to select the required adjustment as shown in Fig. 9a.
(Please refer to procedure on page 11)

B: Press the Normal button on the remote control transmitter twice to return to Normal mode.

3.3.3. The White Balance Adjustment mode.

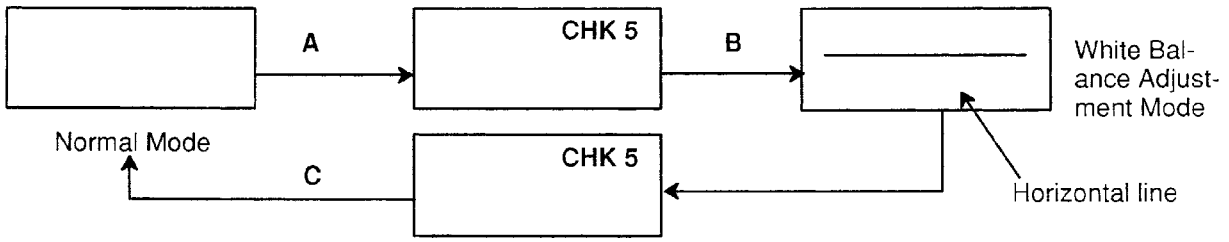


Fig. 9b

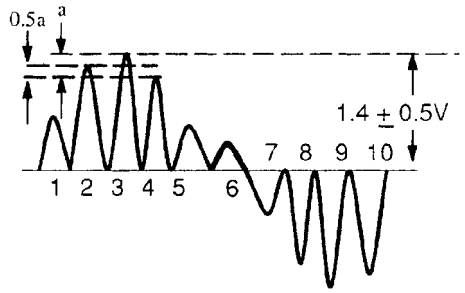
A: Press the Timer button setting 30 min then press Recall button together with volume down.

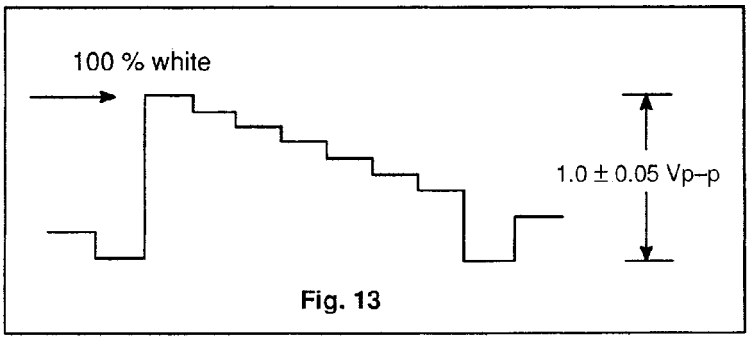
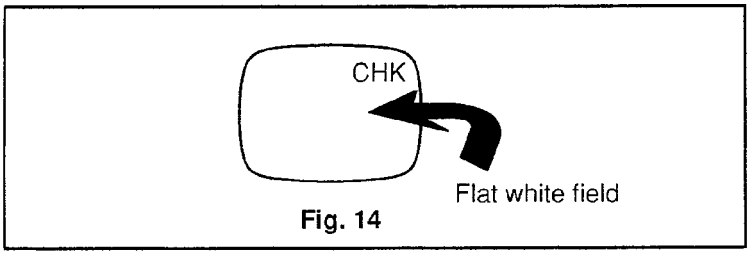
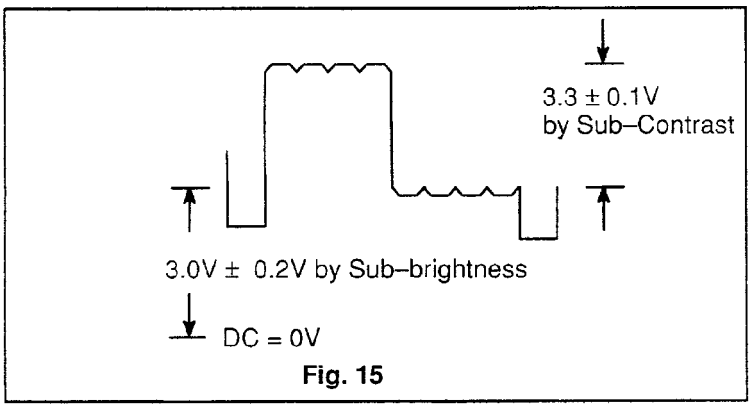
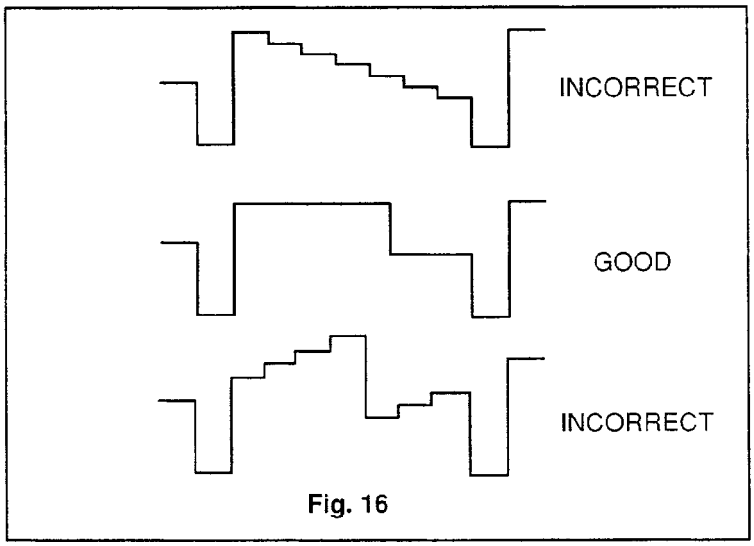
B: Then press the remote button number 5 to enter White Balance Adjustment mode. (Please refer to procedure on page 11). Press the Volume button to change the level.

C: Press the Normal button on the remote control twice to return to Normal mode or press on/off button.

4 Adjustment Procedure

Item / Preparation	Adjustment Procedure
B Voltage 1. Operate the TV set. 2. Set control as follows: Brightness.....minimum Contrast.....minimum	Confirm the DC voltages at the indicated test points are as follows: FBT PIN 9 : 90.0 ± 2.0V IC851 PIN 3 : 9 ± 1.0V IC852 PIN 3 : 5 ± 0.5V E33-1 : 190.0 ± 15V D580 Cathode : 22.0 ± 2.0V D580 Cathode : 46.0 ± 2.5V
RF AGC 1. Workshop a. Receive a colour bar signal at an RF level of 61±2dB with 75Ω loaded. b. Connect an oscilloscope to TPE 23, set to DC mode. 2. B Field a. Receive the television broadcast channel known to have the weakest RF signal strength.	1. Select "RF" indication on screen by using remote control at factory mode. 2. Set RF AGC using remote control volume (+) or volume (-) button until voltage at TPE 23 starts decreasing or until less than 0.2V from max. 3. Increase RF signal strength by 2dB, confirm that TPE 23 voltage drops more than 1V.

High Voltage 1. Operate the TV set. 2. Set control as follows: Brightness.....minimum Contrast.....minimum	1. Connect a DC voltage meter to Pin 1 of IC801 and confirm the voltage is 90.0 ± 2.0V. 2. Connect a high voltage meter to anode of the picture tube. 3. Confirm that the high voltage is within the range of 24.5 (+ 0.7, - 1.5) kV. 4. Normalize the brightness and contrast.
M-NTSC Sub-Tint Adjustment Apply NTSC rainbow pattern. Connect an oscilloscope to TPE28. Connect a short jumper between TPE3 and TPE10. Press S1107 (FUNC.) and set System to NTSC 4.43 Colour.....NORMAL or CENTRE Brightness.....NORMAL or CENTRE Contrast.....NORMAL or MAX. Tint.....NORMAL or CENTRE Press RECALL button on remote control, then press S1110 (VOL. DOWN) to Sub-Tint. Confirm CHK display on screen.	Confirm the amplitude of waveform : 1.4 ± 0.5V 1. Adjust Sub-Tint so that No. 2,3 and 4 becomes level waveform similar to Fig. 10. 2. Confirm TPE 28 (R-out) is **1.4 ± 0.5V.** **Return to user mode.** 3. Confirm phase at Tint is changed more than ±30 by Tint control. 4. Confirm that colour level is maximum when colour DAC is adjusted to maximum position. Note: Use Remote control only when adjusting User Control.  Fig.10

Item / Preparation	Waveforms
Video-input, Sub-Contrast, Sub-Brightness and Sub-Colour Input a colour bar signal with white at 100% of peak level. Connection can be made via A/V and this may enable adjustment of the pattern generator video output level to obtain the correct black to white amplitude (at TPE 11) Confirm that the Sync tip to white amplitude is 1.0± 0.05 Vp-p at Pin 38 (under IC601) as shown in Fig. 13. Receive a colour bar pattern. Connect an oscilloscope to pin 3 of E-32 on the E-Board and chassis earth. Set Colour, Brightness and Contrast to Normal (Colour and Brightness at centre, Contrast at max.) Connect a short jumper between TPE3 and TPE10 (chassis). Note that this step disables the ABL so avoid operation in this condition for long periods at high beam current. Press the RECALL button on remote control together with volume down button. The screen should then show a flat whitish field with the OSD message "CHK" possibly visible at the top as shown in Fig. 14. Press the Function button (S1107) to select the required function to be adjusted (in this case "Contrast") Now press either the Volume "up or down" buttons (S1110 or S1111). "S" and "Contrast" will be displayed on the screen, indicating "Sub" Contrast, and the Sub-Contrast level will be changed. Note that the Volume "up or down" buttons must be pressed while the Function (i.e. Contrast) OSD is still on screen. Press the Function button (S1107) to select Brightness and then Volume "up or down" buttons (S1110 or S1111) will similarly permit Sub-Brightness to be altered and adjusted. Adjust the Sub-Brightness (first) and Sub-Contrast (second) to produce the waveform shown in Fig. 15 Using the Function button (S1107) and Volume "up and down" buttons (S1110 and S1111). Select Sub-colour and adjust to produce the waveform shown in Fig. 16. Cancel the "CHK" mode by pressing the NORMAL button on remote control transmitter and remove the TPE3 to TPE10 jumper.	 Fig. 13  Fig. 14  Fig. 15  Fig. 16

Item / Preparation	Adjustment Procedure
CRT CUT-OFF 1. Input a flat white Field signal and set Contrast to maximum. 2. Connect an oscilloscope to TPY 1 (Green CRT drive) and TPY 2 (Ground). TPY 1 and TPY 2 are located on the Y-PCB (CRT neck panel). 3. Press "Timer" to setting 30 min then set vol min. Press button volume - together with remote button recall to select CRT ADJUSTMENT Mode (shown in Fig. 9a on page 8). "CHK" will appear on the screen. 4. Press the remote button number 3 to select "BR" (meaning "brightness"). Note that repeated pushing of the Function button cycles through the CRT adjustment as shown in Fig. 16. 5. While "BR" is still on screen, set the screen control to minimum by turning it anti-clockwise and use the Volume "up" or "down" remote button to set the DC=0V to video level at 160V as shown in Fig. 17. 6. Advance the screen control sufficiently to see the OSD. While "BR" is still on screen, press number 5 button on the remote control. This will collapse the vertical scan. 7. Slowly adjust the screen control such that one of the R, G or B beams just appears across the centre of the screen. (Fig. 19). This is the setting point for the screen control. Note which colour appeared and do not adjust the low light setting for this particular colour in the following procedure.	

CHK MODE – PRESS NUMBER – 3	OSD	MEANING
1	R	RED LOWLIGHT
2	G	GREEN LOWLIGHT
3	B	BLUE LOWLIGHT
4	SUB BR	SUB BRIGHTNESS
5	R_DR	RED HIGHLIGHT
6	B_DR	BLUE HIGHLIGHT

Fig. 16

Operation of the CHK MODE in CRT Adjustment Mode

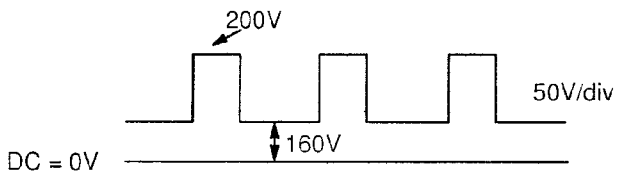
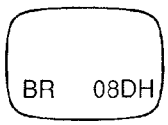


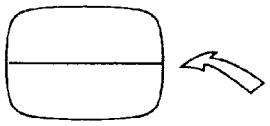
Fig. 17

Sub – bright adjustment



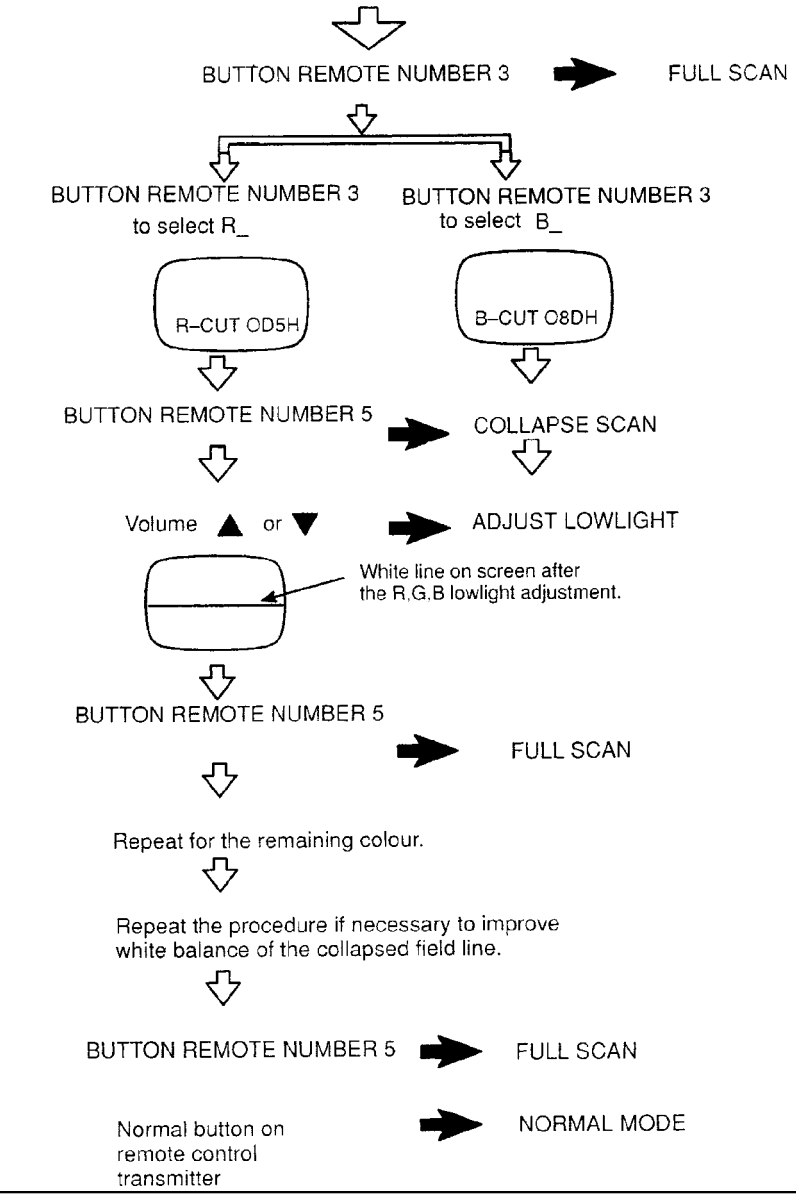
PRESS BUTTON REMOTE VOLUME – OR + TO ADJUSTMENT .

Fig. 18



ADJUST SCREEN UNTIL ONE COLOUR JUST APPEAR.

Fig. 19

Item / Preparation	Adjustment Procedure
R, G, B LOW LIGHT ADJUSTMENT 1. Complete steps 1 to 7 of the CRT cut-off procedure, and do not adjust the screen control from here on. 2. Press the remote button number 3 to return to full field scan, and use the Remote button to select the lowlight setting for one of the two colours (R,G or B) that did not appear at step 7. Fig. 16 shows the selection sequence of the Function Switch (S1107) 3. With the R_,B_ or G_ OSD still on screen, press the remote button number 5 again to collapse the vertical scan. 4. Use the Volume "up" and "down" remote button to match the levels of the two colours now on screen. 5. Repeat Steps 9 to 11 for the remaining colour, to achieve a white line on screen. 6. Press the button number 5 to return to full frame scan. **R, B HIGH LIGHT ADJUSTMENT** 1. Press the Normal Button on the remote control transmitter twice to return to Normal Mode, after completing the preceding CRT cut-off and lowlight adjustments. 2. Set Contrast to Normal (max) and continue using the flast white field input as per Step 1. 3. Press the timer button setting 30 min then press Volume down button and recall together. Then press button number 5. 4. Use the Button number 3 to select R (red highlight) and B (blue highlight) as necessary (refer to Fig 16). 5. With R^- or B^- still on screen, press the Volume button "up" and "down" as necessary to achieve a uniform white field. 6. Press the Normal Button on the remote control transmitter twice to return to Normal Mode. 7. Input a greyscale pattern and confirm correct lowlight and highlight white balance.	EXAMPLE: If a green line appeared at Step 7. 

Before Colour Purity, Convergence and White Balance adjustments are attempted
V. Height, H. Centre and Focus adjustments must be completed.

Colour Purity

1. Set the Brightness and Contrast controls to their maximum positions.
2. Operate the TV set for 30 minutes.
3. Fully degauss the picture tube by using an external degaussing coil.
4. Apply a crosshatch pattern signal and adjust the static convergence magnets to the approximately correct position.
5. Receive a black and white signal.
6. Set the controls as follows:
   Red.....maximum
   Green.....maximum
   Blue.....minimum
   Press the SHIPPING button on the remote control twice to select CRT Adjustment Mode and then the Function button (S1107) as per Fig. 16 to select low lights.
7. Loosen the clamp screw for the deflection yoke A in Fig. 24 and move the deflection yoke as close to the purity magnet as possible.
8. Adjust the purity magnetic rings so that a vertical green field is obtained at the centre of the screen.

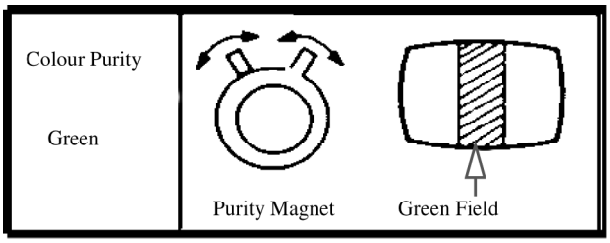


Fig. 20

9. Slowly push the deflection yoke and set it where a uniform green field is obtained.

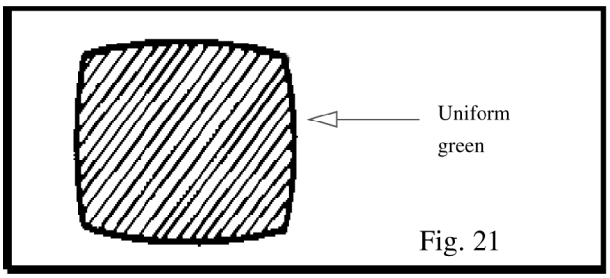


Fig. 21

10. Re-adjust the Low Light controls to their correct settings and make sure that a uniform white field is obtained.
11. Tighten the clamp screw A in Fig. 24.

Convergence

1. Apply a crosshatch pattern signal and Normalize Contrast control to the maximum position.
2. Adjust Brightness until the grey portion of the crosshatch pattern just becomes black.
3. Adjust the Red and Blue line at the centre of the screen by rotating the R-B static convergence magnetic rings.

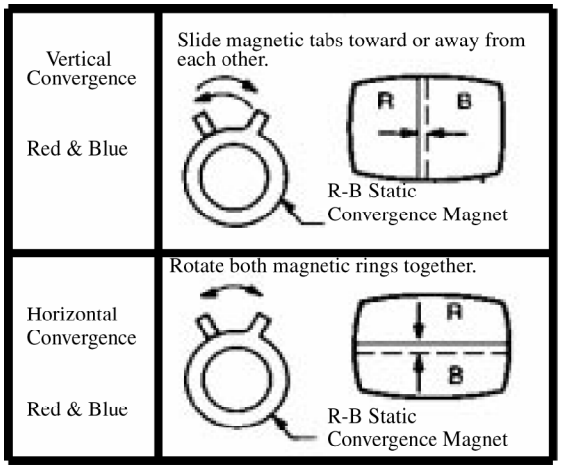


Fig. 22

4. Adjust Red and Blue with the Green line at centre of the screen by rotating (RB) -G static convergence magnetic rings.
5. Lock convergence magnets with silicone sealer.
6. Remove the DY wedges and slightly tilt the deflection yoke vertically and horizontally to obtain the good overall convergence.

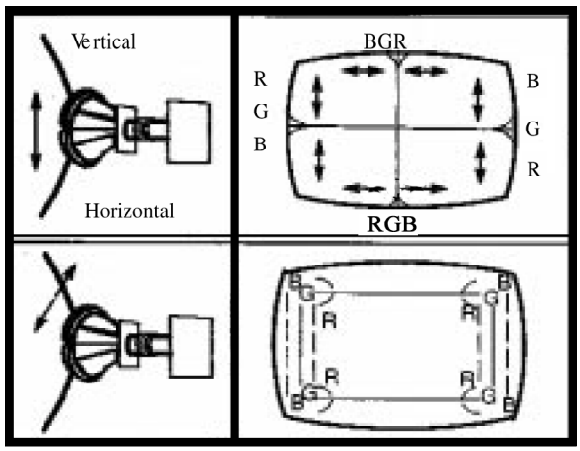


Fig. 23

7. Fix the deflection yoke by re-inserting the DY wedges. Refer to Fig. 24.
8. If purity error is found, repeat “Colour Purity” adjustment.

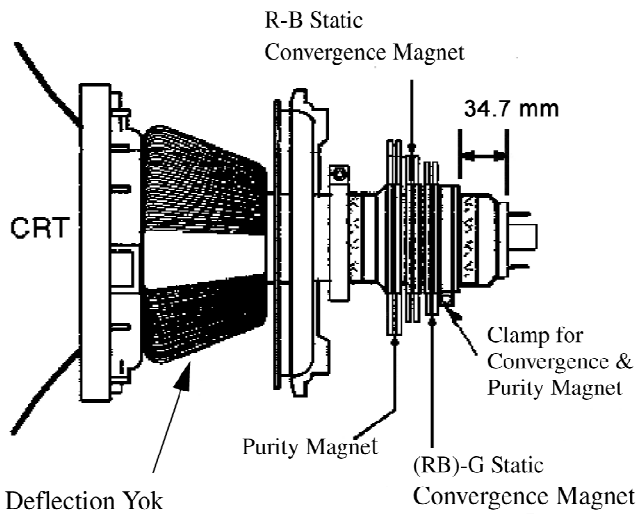


Fig. 24

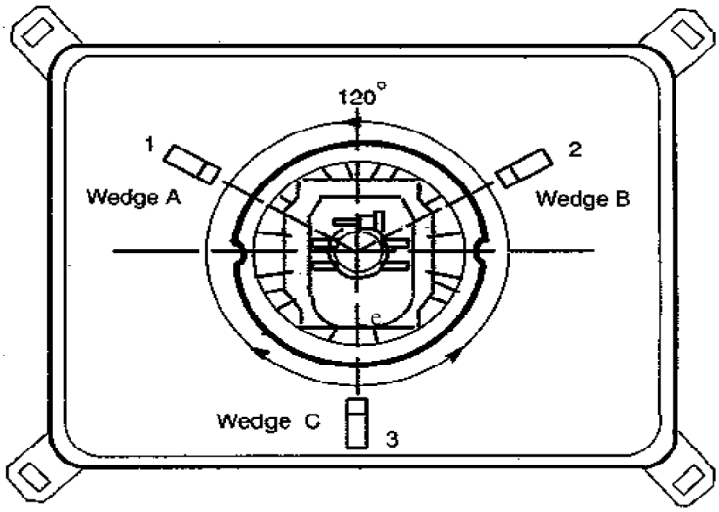
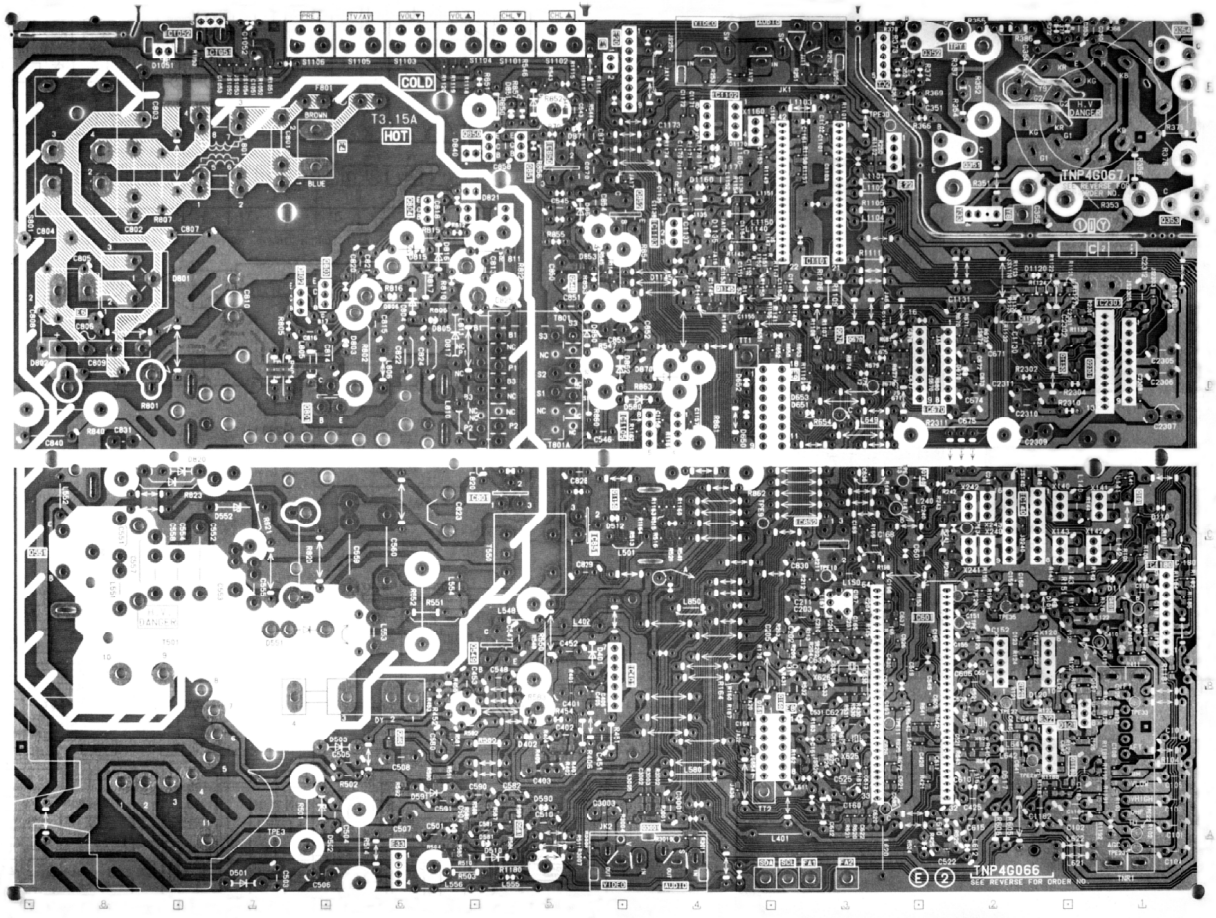


Fig. 25

Notes:

1. Wedge A, B and C should be inserted following the sequence of 1, 2 and 3 shown in Fig. 25.
2. The wedges should be set 120° apart from each other.
3. Be certain that the four wedges are firmly fixed and the Deflection Yoke is tightly clamped in place. Otherwise the Deflection Yoke may shift its position and cause a loss of convergence and purity.

5 CONDUCTOR VIEWS
E-BOARD TNP4G066AC
TNP4G066AA

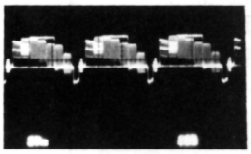


E-BOARD	
INTERGRATED CIRCUITS	
IC801	B3
IC1051	B5
IC802	B5
IC401	D2
IC805	D3
IC1102	D5
IC602	E3
IC1101	E4
IC503	E4
IC1104	E4
IC102	F1
IC601	F2
IC807	F3
IC1103	G1
IC806	G2
IC2301	G3

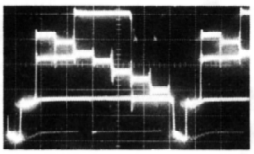
E-BOARD	
TRANSISTORS	
Q566	A3
Q801	B3
Q802	B4
Q503	C1
Q421	C1
Q805	C4
Q803	C5
Q445	D2
Q446	D2
Q565	D3
Q564	D5
Q2001	D1
Q447	D3
Q150	E1
Q151	E2
Q220	E2
Q675	E4
Q1135	E5
Q1180	F1
Q120	F2
Q1136	F2
Q1164	F3
Q230	F4
Q351	F5
Q352	F5
Q216	G2
Q101	G3
Q354	G5

E-BOARD	
TEST POINTS	
TPF3	B1
TPE20	B1
TPF7	B1
TPF6	B1
TPE32	B1
TPE16	B1
TPE8	B1
TPE18	B1
TPE10	C2
TPE21	B2
TPE19	F1
TPE24	F2
TPE13	F2
TPE11	F2
TPE14	F2
TPE12	F2
TPE30	F5
TPE31	F5
TPE22	G1
TPE23	G1
TPE25	G2
TPE26	G3
TPE27	G3
TPE29	G3
TPE9	G3

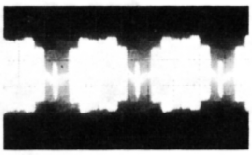
6 TEST POINT WAVEFORMS



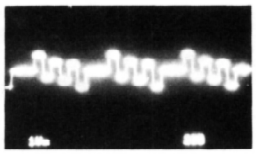
1. TPE 13 (E-PCB)
Composite Video Signal
3.4V. 20µs / Div



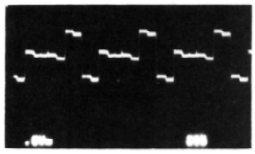
2. IC601 Pin 35 (E-PCB)
Video in
0.74V. 20µs / Div



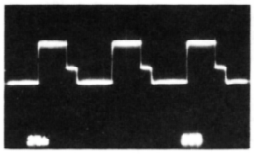
3. IC601 Pin 33 (E-PCB)
Chroma In
1.1V. 20µs / Div



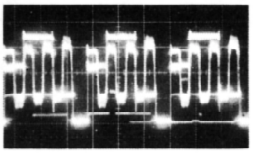
4. IC601 Pin 54 (E-PCB)
B – Y In
1.5V. 20µs / Div



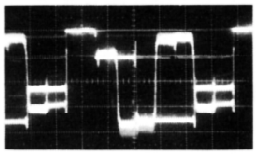
5. IC601 Pin 55 (E-PCB)
R – Y In
1.1V. 20µs / Div



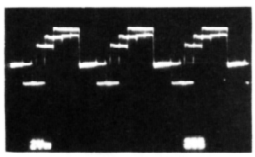
6. IC601 Pin 15 (E-PCB)
Horizontal Out
3.9V. 20µs / Div



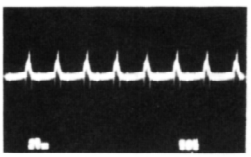
7. (IC601 PIN 24)
(E-PCB)
6.5V. 20µs / Div



8. TPE 28 (IC601 PIN 22)
(E-PCB)
6.3V. 20µs / Div

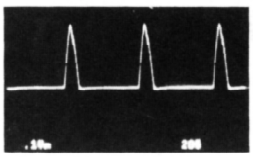


9. TPE 27 (E-PCB)
Green Output From IC601 Pin 23 .
5.5V. 20µs / Div



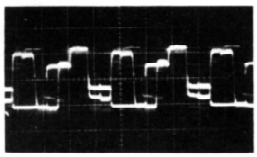
10. FBT Pin 4 (E-PCB)

316V. 50µs / Div

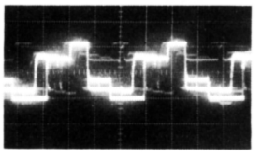


11. FBT Pin 6 (E-PCB)

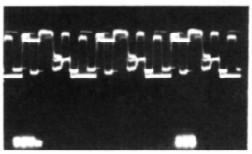
273V. 20µs / Div



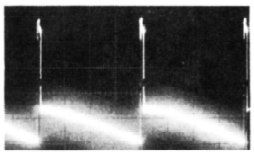
12. Q351 Collector
(Y-PCB)
124V. 20µs / Div



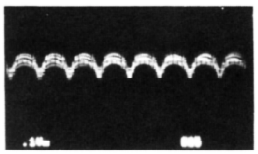
13. Q352 Collector
(Y-PCB)
109V. 20µs / Div



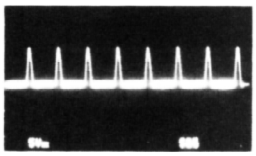
14. Q353 Collector
(Y-PCB)
125V. 20µs / Div



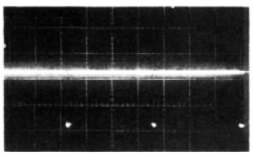
15. IC401 PIN 2 (E-PCB)
Vertical Out
48.2V. 5ms / Div



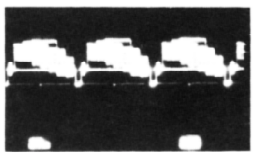
16. Q551 Base (E-PCB)
Horizontal Out
57V. 50µs / Div



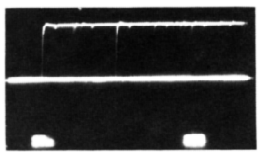
17. Q551 Collector (E-PCB)
Horizontal Out
800V. 50µs / Div



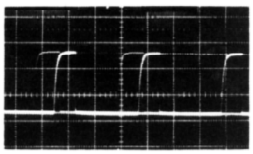
18. IC601 Pin 26 (E-PCB)
Vertical Out
4.4V. 5ms / Div



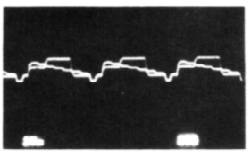
19. Video Output Terminal
(E-PCB)
3.8V. 20µs / Div



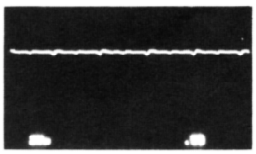
20. IC601 Pin 17 (E-PCB)
S D A
4.8V. 20µs / Div



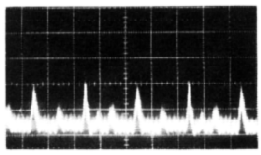
21. IC601 Pin 13 (E-PCB)
S C L
5.0V. 20µs / Div



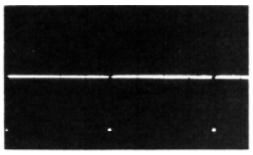
22. IC601 Pin 48 (E-PCB)
SYNC
2.2V. 20µs / Div



23. IC1101 Pin 10 (E-PCB)
Band 1
0.5V. 1µs / Div

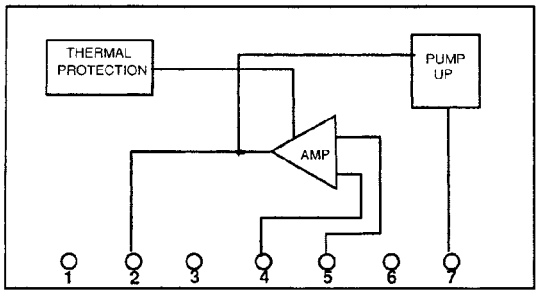


24. IC1101 Pin 11 (E-PCB)
Band 2
0.2V. 1µs / Div

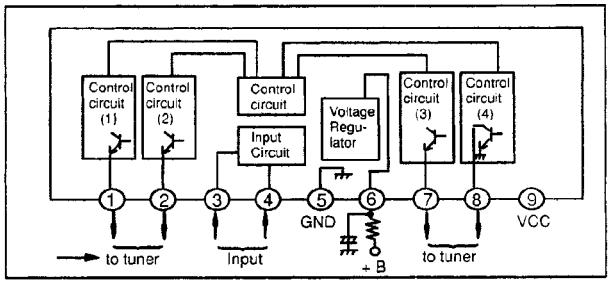


25. IC401 Pin 2 (E-PCB)
Vertical Pump up out
2.0V. 5ms / Div

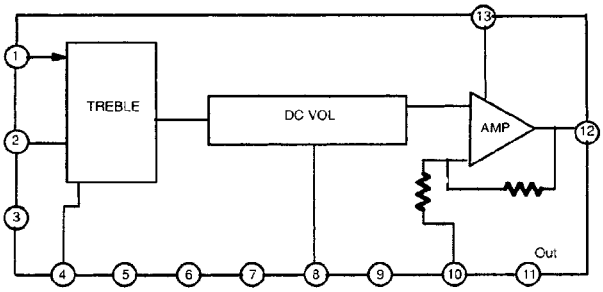
7 BLOCK DIAGRAM FOR INTEGRATED CIRCUITS



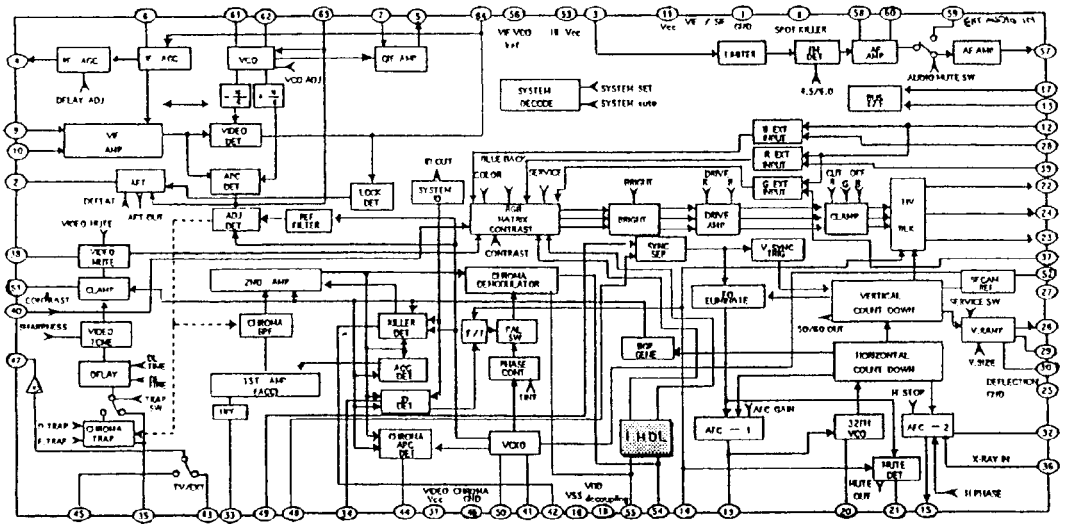
IC401 (LA 7840)



IC1103 (AN5071)



IC2301 (LA4289)



8 Schematic Diagram for models TC-15PM10R (MX-7 Chassis)

IMPORTANT SAFETY NOTICE Components identified by mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

Notes:

1. Resistor
   All resistors are carbon 1.4W resistors unless marked as follows:

   Unit of resistance is OHM (Ω) (K=1 000 M=1 000 000)

	Nonflammable		Metal Oxide
	Solid		Metal Film
	Wire Wound		Fuse

2. Capacitor
   All capacitors are ceramic 50V capacitors unless marked as follows:

   Unit of capacitance is µF, unless otherwise noted.

	Temperature Compensation		Electrolytic
Ⓜ	Polyester		Bipolar
ⓜ	Metalized Polyester	Ⓣ	Dipped Tantalum
	Polypropylene	Ⓩ	Z-Type

3. Coil
   Unit of inductance is µH, unless otherwise noted.

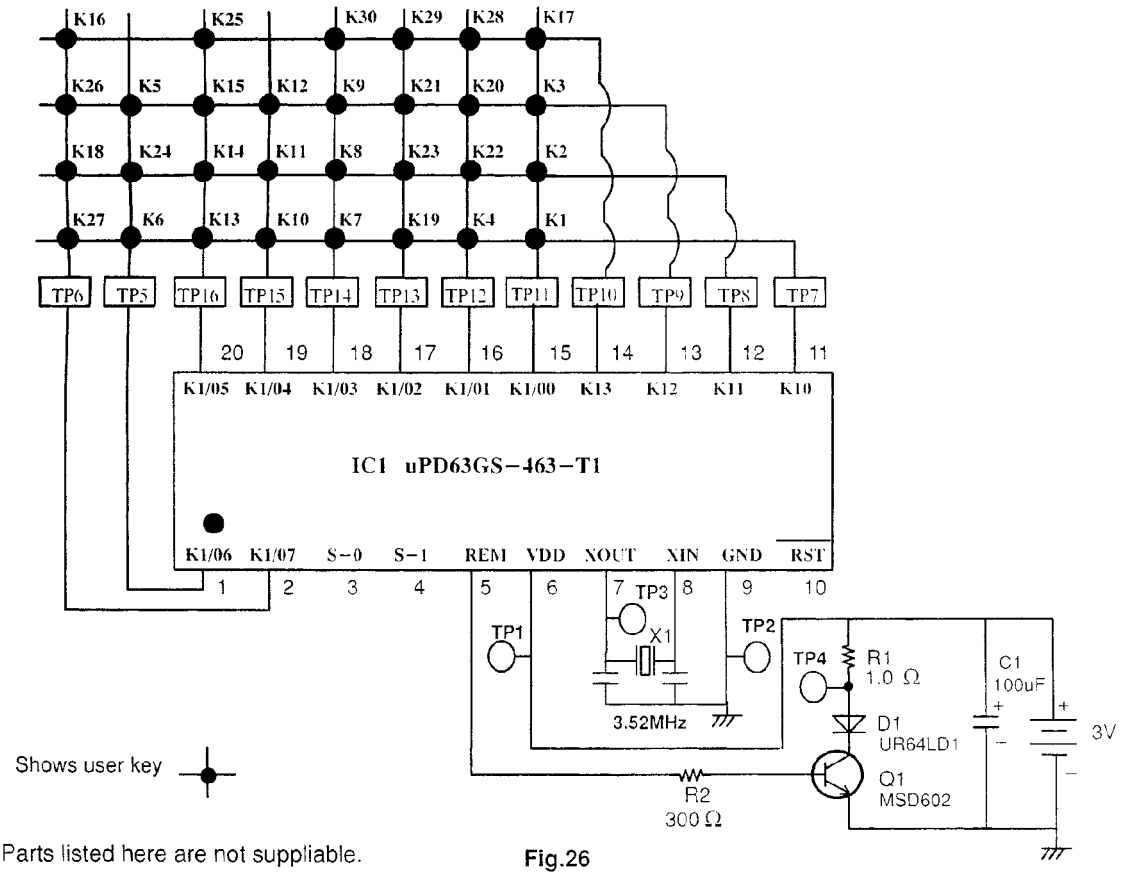
   Unit of resistance is OHM (Ω) (K=1 000 M=1 000 000)
4. Test Point
   ⚲ : Test Point position
5. Earth Symbol
   ⏚ : Chassis Earth (Cold) ⏚ : Line Earth (Hot)
6. Voltage Measurement
   Voltage is measured using a DC voltmeter.
   Conditions of the measurement are the following:
   Power Source.....AC 220V, 50Hz
   Receiving Signal.....Colour Bar signal (RF)
   All customer's controls.....Maximum positions
7. Number in red circle indicates waveform number.
   (See waveform pattern table)
8. When arrow mark (➶) is found, connection is easily found from the direction of arrow.
9. ➔ : Indicates the major signal flow.
10. This schematic diagram is the latest at the time of printing and subject to change without notice.

Remarks:

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection. The circuit is defined by HOT and COLD indications in the schematic diagram. Take the following precautions:
   All circuits except the Power Circuit are cold.
   Precautions:

a	Do not touch the hot part or the hot and cold parts at the same time or you may be shocked
b	Do not short-circuit the hot and cold circuits or a fuse may blow and parts may break
c	Do not connect an instrument such as an oscilloscope to the hot and cold circuits simultaneously or a fuse may blow. Connect the earth of instruments to the earth connection of the circuit being measured.
d	Make sure to disconnect the power plug before removing the chassis.

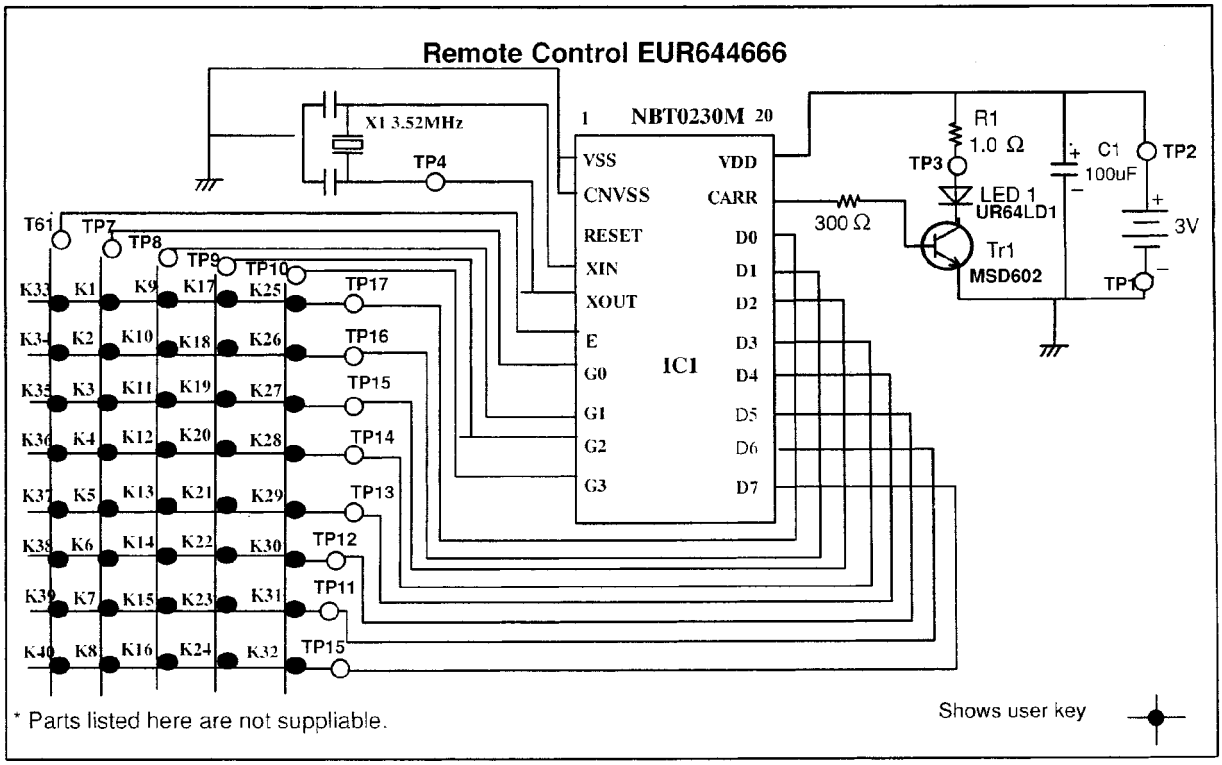
Remote Control EUR501380



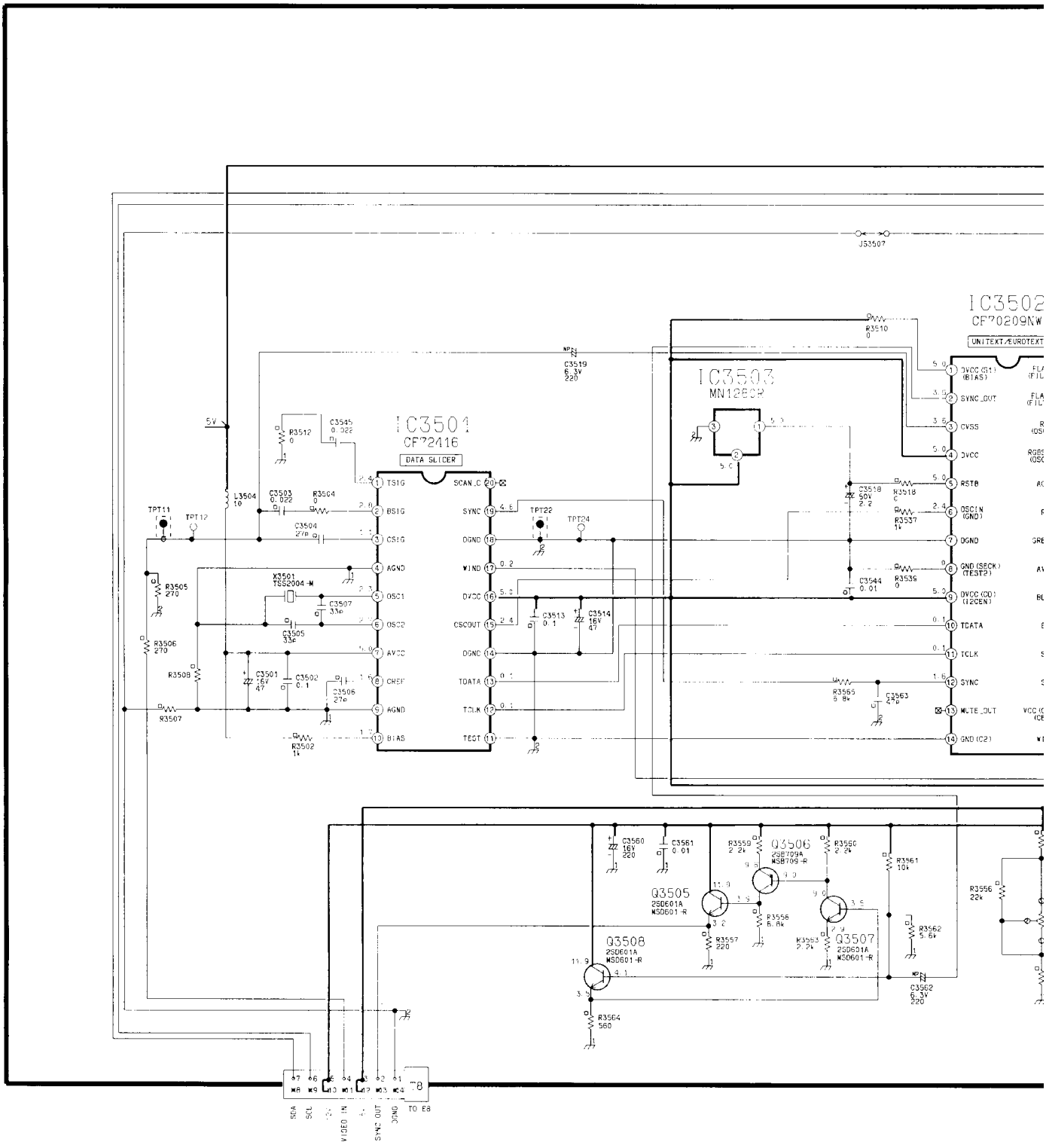
* Parts listed here are not suppliable.

Fig.26

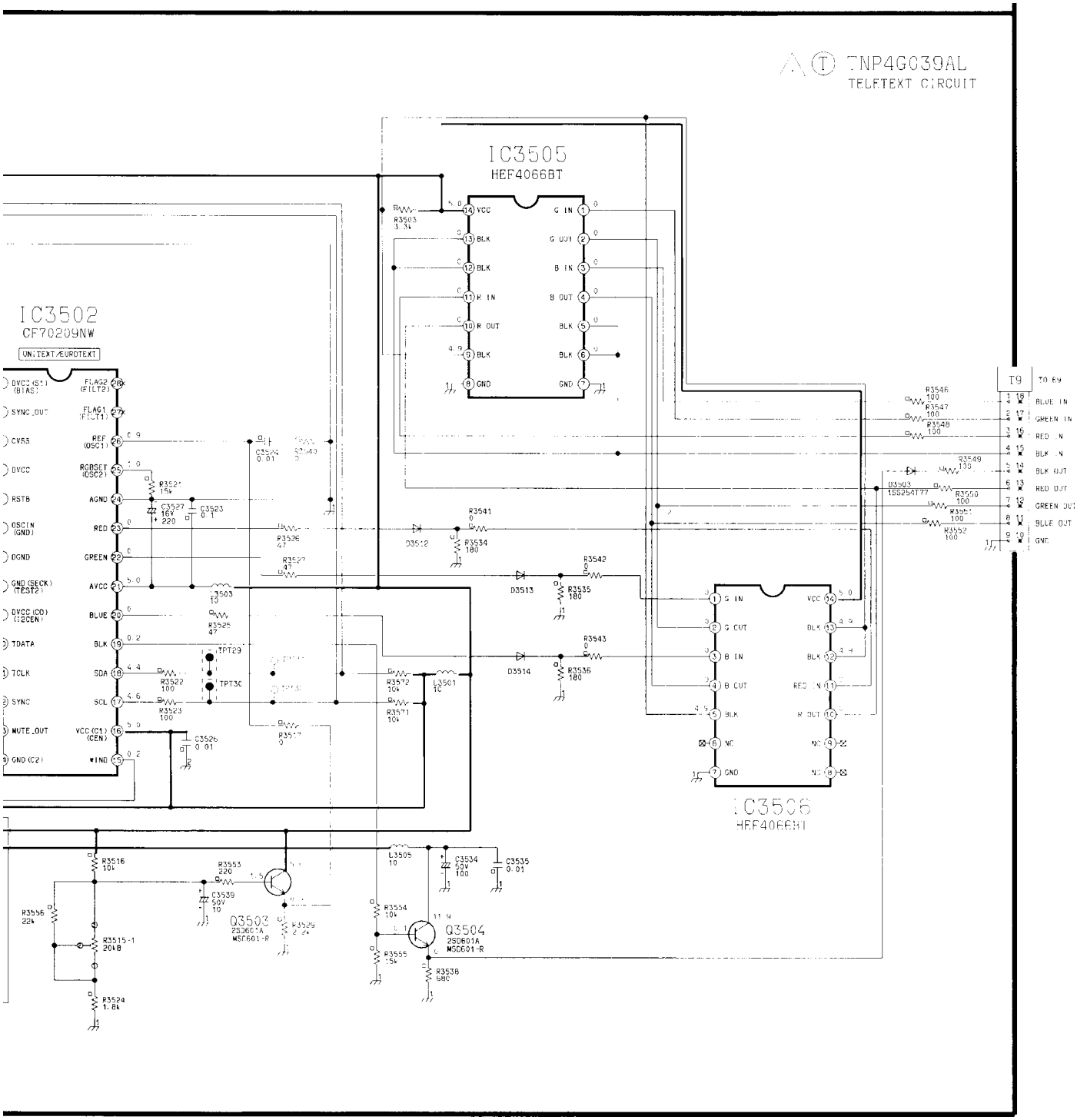
KEY NO.	FUNCTION	DATA CODE	KEY NO.	FUNCTION	DATA CODE
1	POWER	3D	16	MAIN MENU	52
2	MUTE	32	17	PIC MENU	50
3	TV/AV	05	18	NORMALIZE	0C
4	RECALL	39	19	TIMER	0F
5	DOUBLE DIGIT	3B	20	CH UP	34
6	CH 0	19	21	CH DOWN	35
7	CH 1	10	22	VOL +	20
8	CH 2	11	23	VOL -	21
9	CH 3	12	24	CURSOR UP	4A
10	CH 4	13	25	CURSOR DOWN	4B
11	CH 5	14	26	CURSOR LEFT	4E
12	CH 6	15	27	CURSOR RIGHT	4F
13	CH 7	16			
14	CH 8	17			
15	CH 9	18			

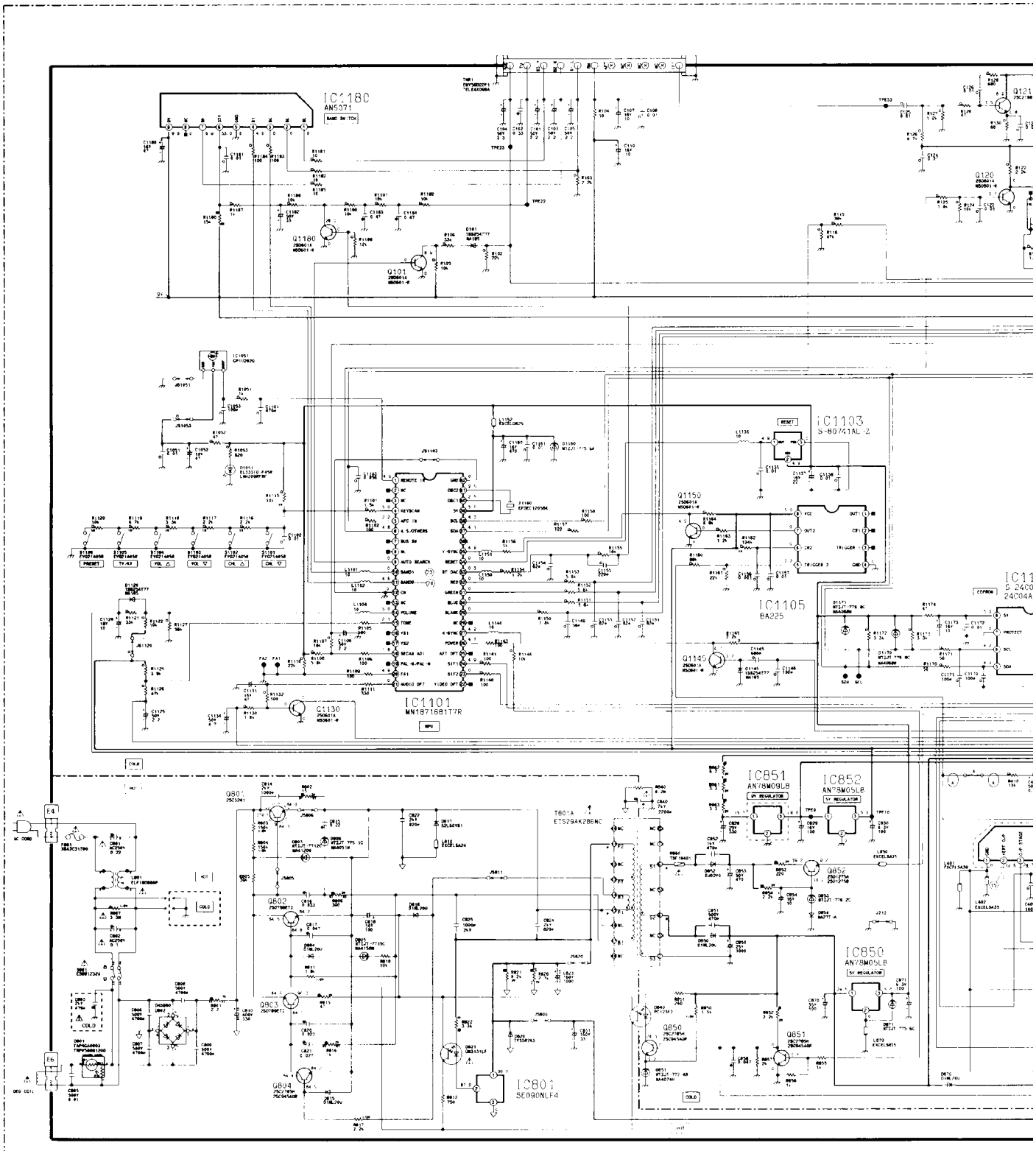


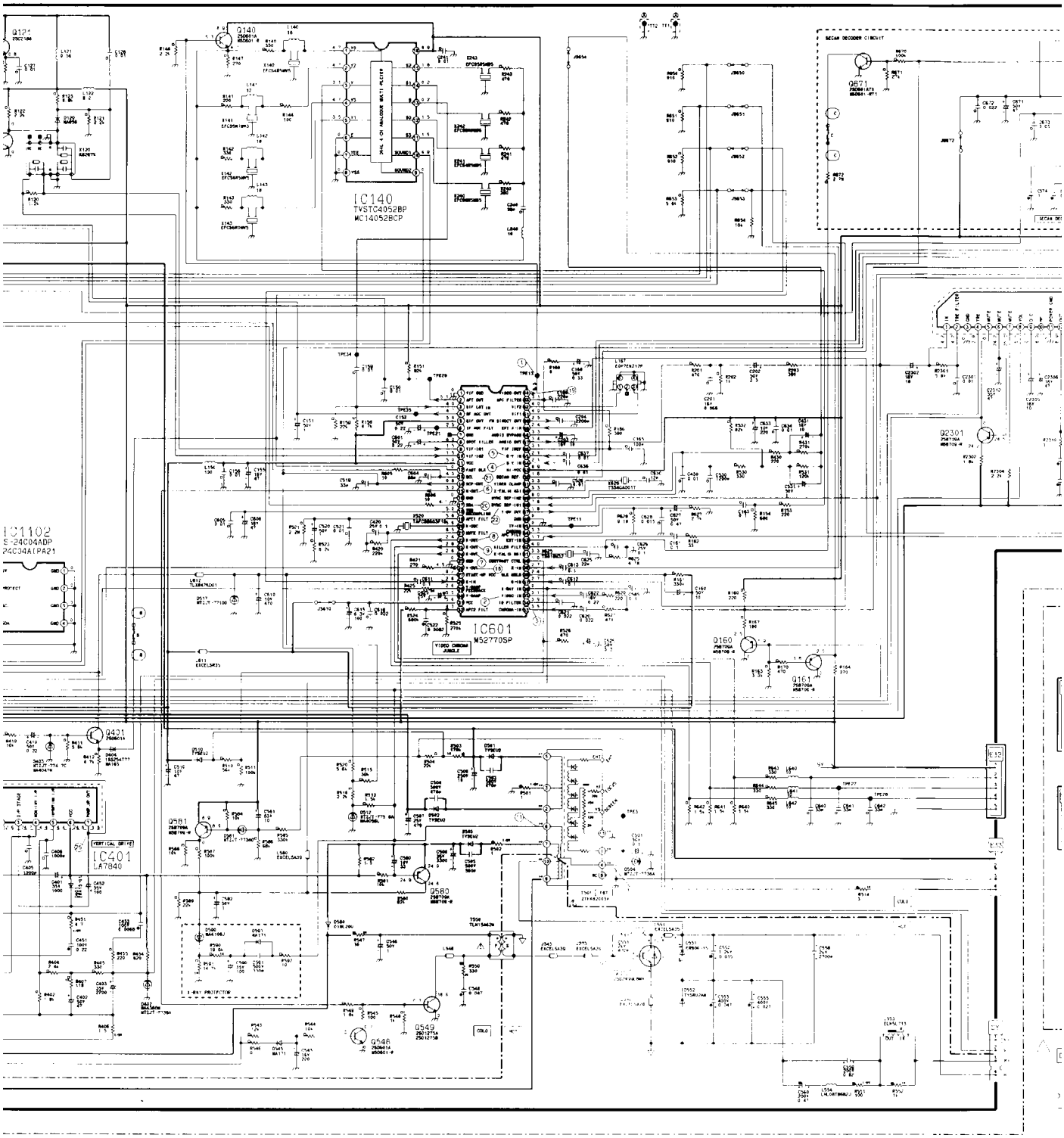
KEY NO.	FUNCTION	DATA CODE	KEY NO.	FUNCTION	DATA CODE
1	MAIN MENU	52	21	CH 3	12
2	-	-	22	CH 6	15
3	CURSOR UP	4A	23	CH 9	18
4	NORMALIZE	0C	24	DOUBLE DIGIT	3B
5	POWER	3D	25	CURSOR RIGHT	4F
6	MUTE	32	26	HOLD	09
7	TIMER	0F	27	DISPLAY CANCEL	04
8	TV/AV	05	28	CYAN	73
9	CURSOR LEFT	4E	29	CH UP	34
10	F/T/B	0C	30	CH DOWN	35
11	TIME/TEXT	0B	31	VOL UP	20
12	GREEN	71	32	VOL DOWN	21
13	CH 2	11	33	PIC MENU	50
14	CH 5	14	34	TV/AV	03
15	CH 8	17	35	INDEX	08
16	CH 0	19	36	RED	70
17	-	-	37	CH 1	10
18	CURSOR DOWN	4B	38	CH 4	13
19	REVEAL	1C	39	CH 7	16
20	YELLOW	72	40	RECALL	39

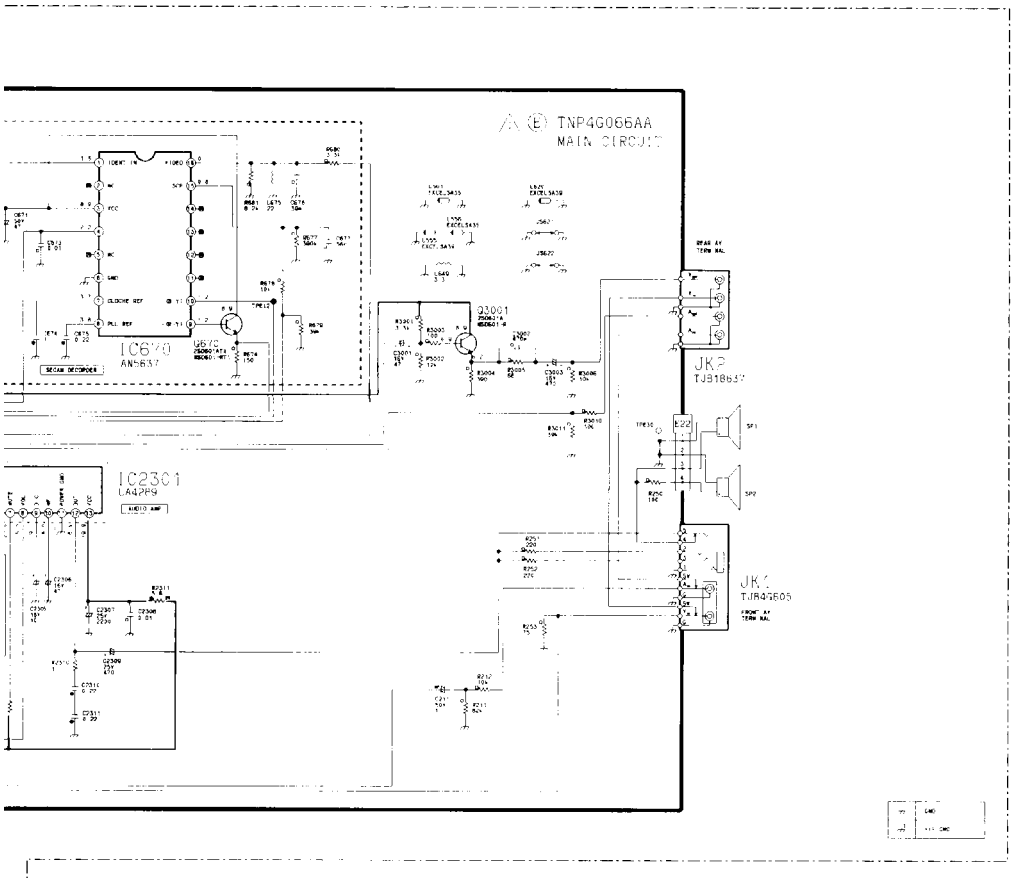

IC3501
CF72416
DATA SLICER
IC3503
MN1280R
IC3502
CF70209NW
UNITEXT/EUROTEXT
J53507
TO E8
Q3505
2SD601A
WSD601-R
Q3506
2SB709A
WSB709-R
Q3507
2SD601A
WSD601-R
Q3508
2SD601A
WSD601-R

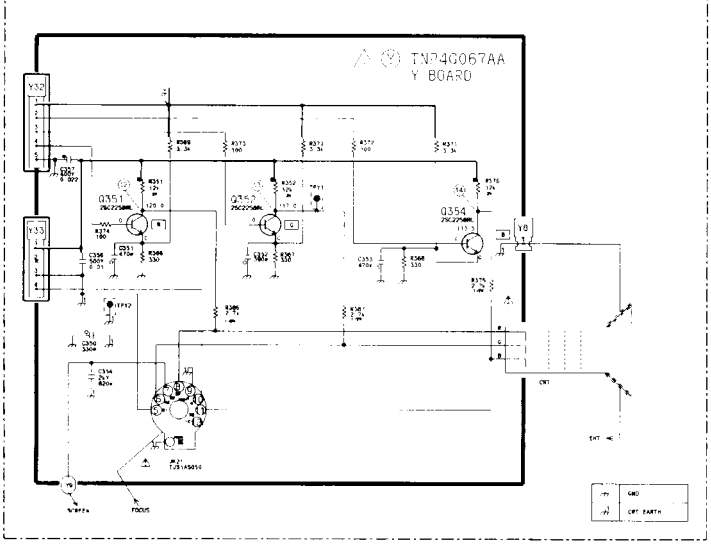
TNP4G039AL
TELETEXT CIRCUIT

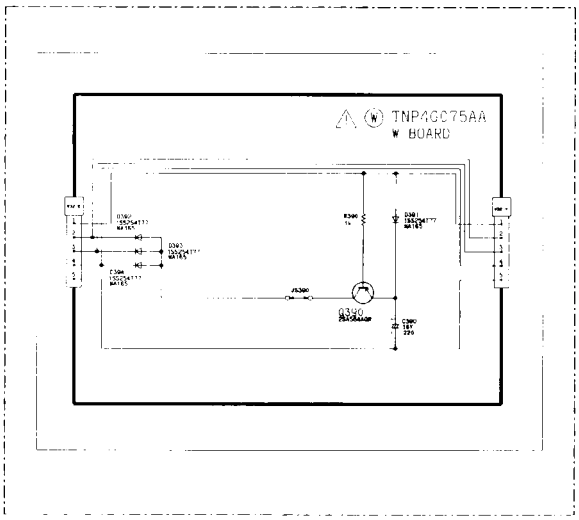


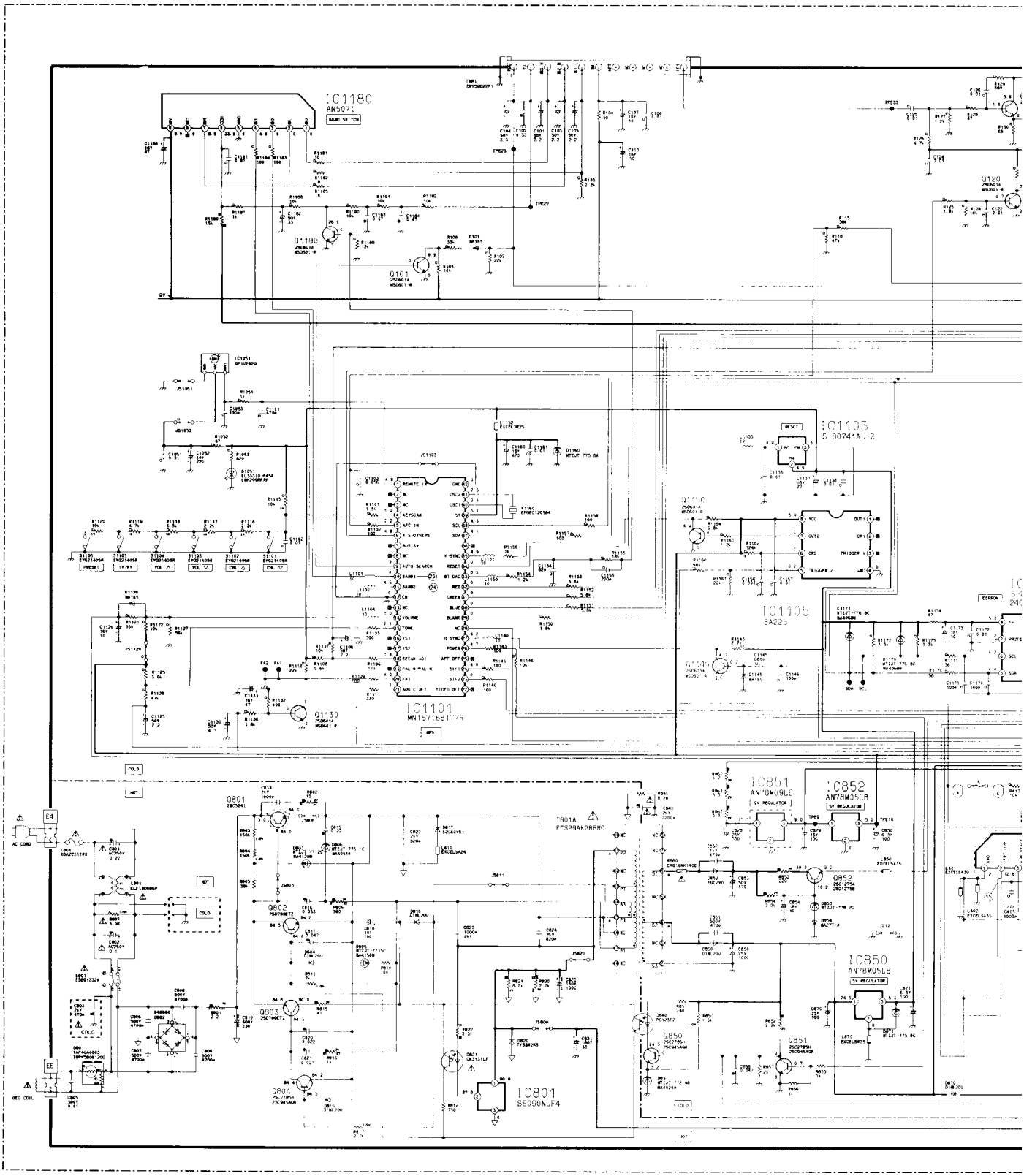

IC1180
AN5071
Q1180
Q101
IC1103
S-80741AL-Z
Q1150
IC1105
BA225
IC1101
MN1871681T7R
Q1130
IC851
AN78M09LB
IC852
AN78M05LB
IC850
AN78M05LB
Q850
Q851
Q852
Q801
Q802
Q803
Q804
IC801
SE090NLF4
T801A
ET529AK28ENC

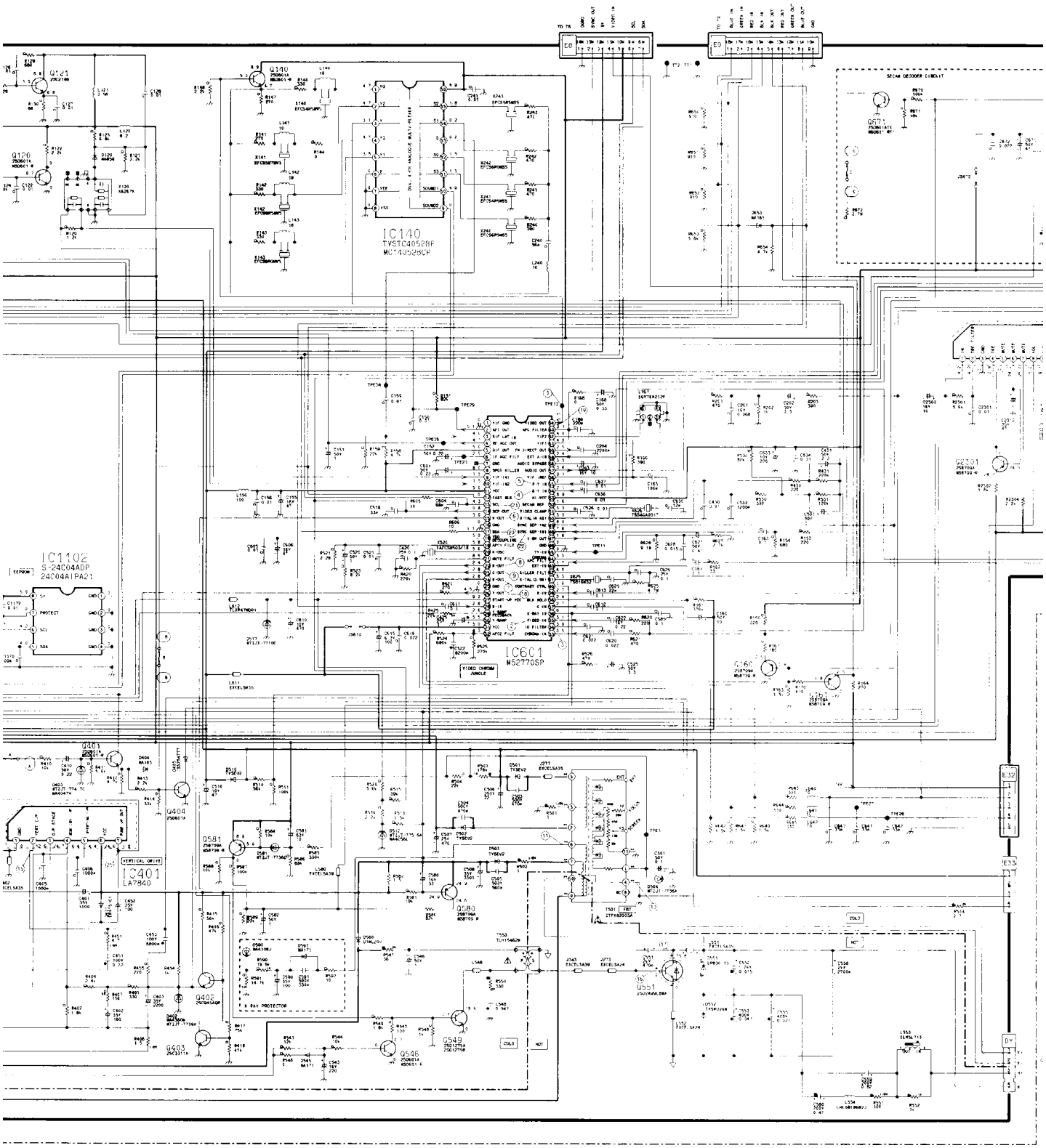

IC140
TVSTC4052BP
MC14052BCP
IC1102
S-24C04ADP
24C04A1PA21
IC601
M52770SP
IC401
LA7840
Q140
Q2301
Q160
Q161
Q421
Q581
Q580
Q549
Q546
Q671
SCAN DECODER CIRCUIT
VERTICAL DRIVE
X-RAY PROTECTION
VIDEO CHROMA

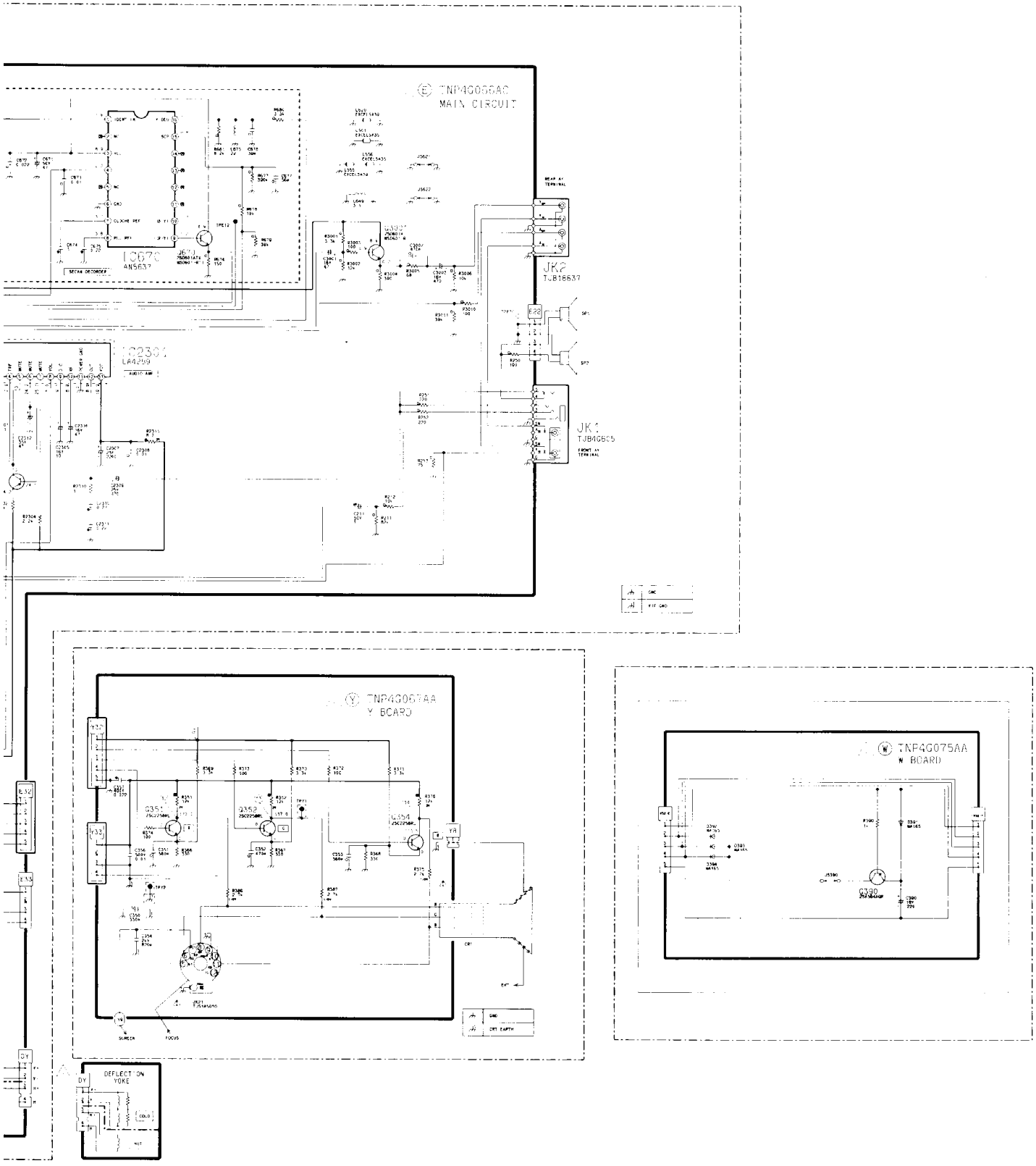

TNP4G066AA
MAIN CIRCUIT
IC6470
AN5637
SCAN DECODER
IC2301
UA42P9
AUDIO AMP
Q3001
JK2
TJB18637
JK1
TJR4G605
REAR AV TERM NAL
FRONT AV TERM NAL
SP1
SP2

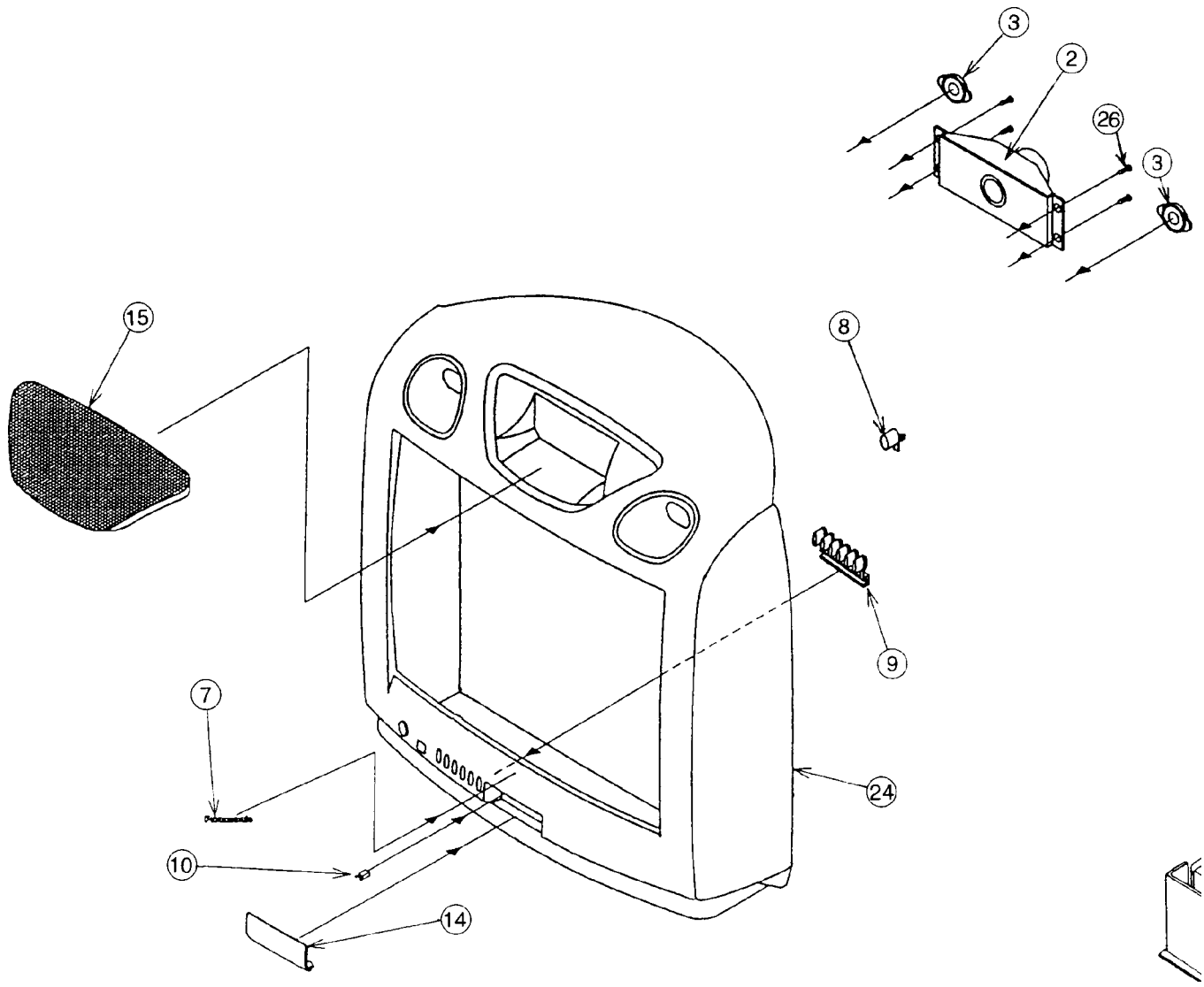

TNP4G067AA
Y BOARD
Y32
Y33
Y8
Q351
Q352
Q354
FOCUS
DEFLECTION YOKE
DY
COLD
HOT


TNP4G075AA
W BOARD
Q390


IC1180
AN5071
BAND SWITCH
Q1190
Q101
Q120
IC1103
S-80741AL-Z
RESET
IC1105
BA225
IC1101
MN1870911YK
Q1130
IC851
AN78M09LB
5V REGULATOR
IC852
AN78M05LB
5V REGULATOR
IC850
AN78M05LB
5V REGULATOR
Q801
Q802
Q803
Q804
Q852
Q850
Q851
T801A
ETS29AK2BBNC
IC801
SE050NLF4
AC CORD
DEG COIL
COLD
HOT

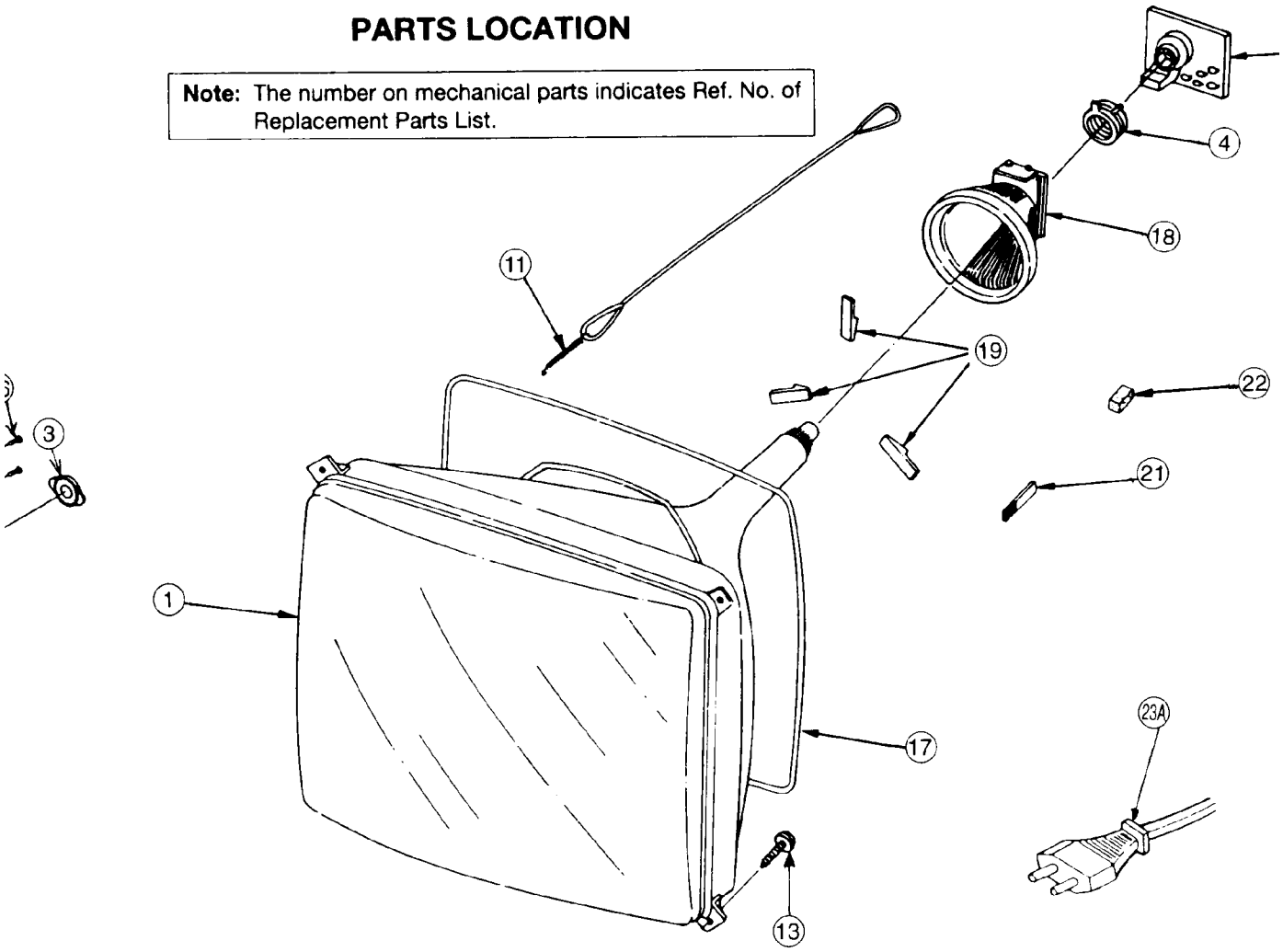

IC140
TVSTC40528F
IC1102
S-24C04ADP
24C04AIPA21
IC601
M52770SP
IC401
LA7860
VERTICAL DRIVE
VIDEO CHROMA JUNGLE
SECAM DECODER CIRCUIT
EEPROM
PROTECT
SCL
SDA

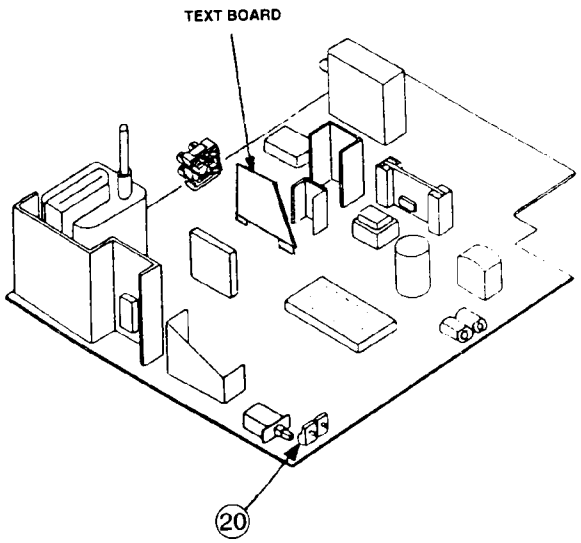

TNP4G056AC
MAIN CIRCUIT
IC670
AN5637
IC2301
LA4299
JK2
TJB18637
JK1
TJB40625
TNP4G057AA
Y BOARD
TNP4G075AA
W BOARD
Q390
DEFLECTION YOKE

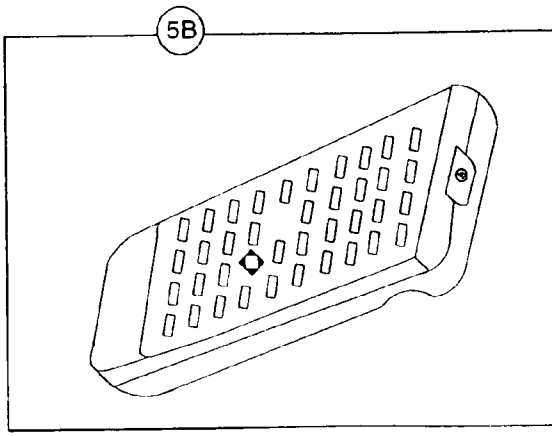

3
2
26
3
15
8
9
7
24
10
14

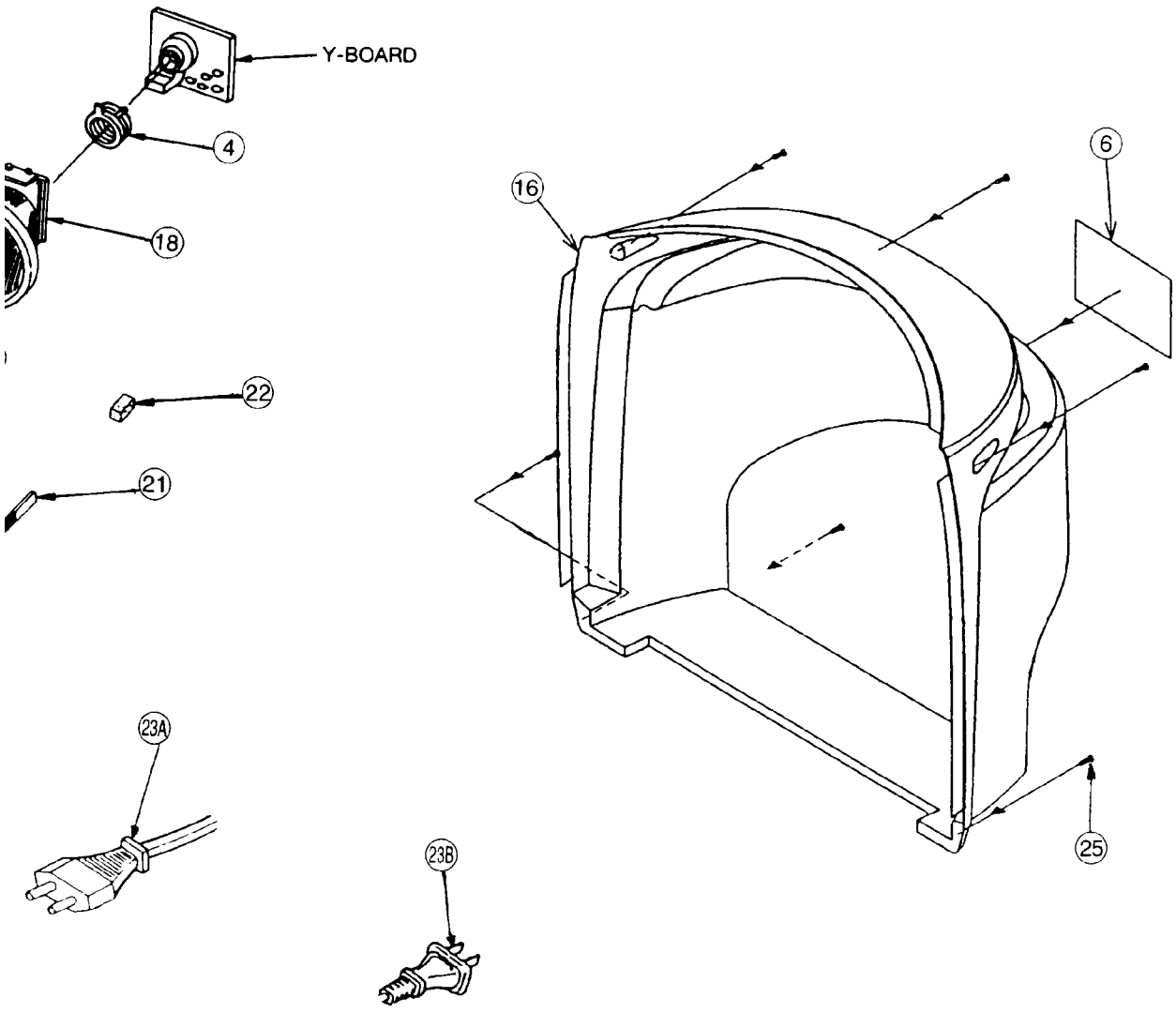
PARTS LOCATION

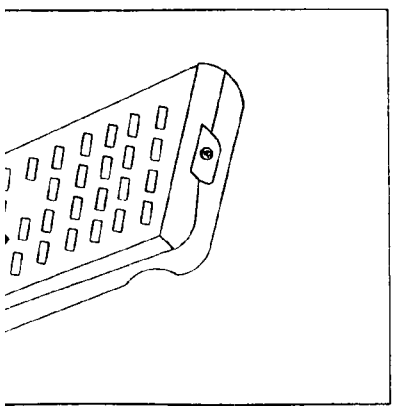
Note: The number on mechanical parts indicates Ref. No. of Replacement Parts List.

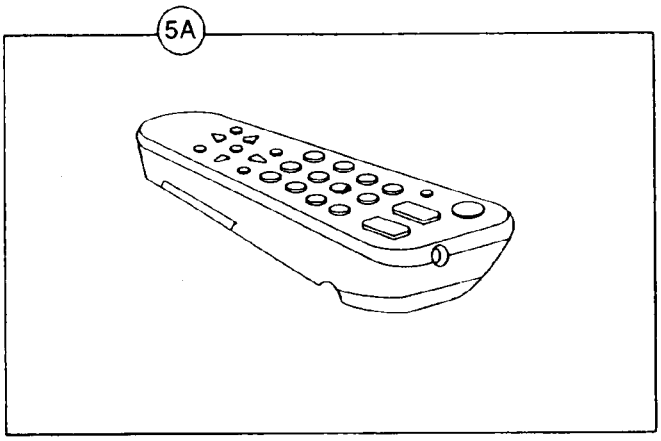







Y-BOARD
4
18
22
21
16
6
25
23A
23B




5A

10 Replacement Parts List

Important Safety Notice
Components identified by ▲ mark have special characteristics important for safety. When replacing any of these components, use manufacturer's specified parts.

Note: Printed circuit board assembly with "NLA" is no longer available after production discontinuation of the complete set.
Abbreviation of part name and description

1. Resistor
Example:

ERD25TJ104 C 100KΩ, J, 1/4W
Type Allowance

Type	Allowance
C: Carbon	F: ±1%
F: Fuse	G: ±2%
M: Metal Oxide Metal Film	J: ±5% K: ±10%
S: Solid	M: ±20%
W: Wire Wound	

2. Capacitor

Example:
ECKF1H103ZF C 0.01UF, Z, 50V
Type Allowance

Type	Allowance
C: Carbon	C: ±0.25pF
E: Electrolytic	D: ±0.5pF
P: Polyester Polypropylene	F: ±1pF G: ±3%
T: Tantalum	J: ±5%
	K: ±10%
	L: ±15%
	M: ±20%
	P: +100% -0%
	Z: +80% -20%

Replacement Parts List

(FOR TC-21L100R/TC-21W2 page 22 to 29)

Ref.No.	Part No.	Description	
	MECHANICAL PARTS (TC-21L100R / TC-21W2 / TX-21W2T)		
1	A51JXS064X	PICTURE TUBE	⚠
2	EASG15S504A2	SPEAKER	MTV
3	EASJ3FP11D3	TWEETER	MTV
4	ETC33X82NA	CONVERGENCE YOKE	MTV
5a	EUR501380	REMOTE CONTROL	MTV
5b	EUR644666	REMOTE CONTROL (TX-21W2T ONLY)	MTV
6	TBM4G0365	MODEL NAME PLATE (S'PORE)	MTV ⚠
6	TBM4G0379	MODEL NAME PLATE (TC-21W2)	MTV ⚠
6	TBM4G0383	MODEL NAME PLATE (TX-21W2T ONLY)	MTV ⚠
6	TBM4G0407	MODEL NAME PLATE (HONG KONG ONLY)	MTV ⚠
7	TBM4G3001	PANASONIC BADGE	MTV
8	TBX4G84400	POWER BUTTON	MTV
9	TBX4G84500	6 KEY BUTTON	MTV
10	TEK6935	DOOR SWITCH	
11	TES4G206	COIL SPRING	MTV
12	TES4537	SPRING	MTV
13	THT4G1007R	CRT SCREW	MTV
14	TKP4G11191	DOOR	MTV
15	TKP4G50201	SP PUNCHING PANEL	MTV
16	TKU4G6300-1	BACK COVER	MTV
17	TLK4G9012A	DEGAUSSING COIL	MTV ⚠
18	TLY4G307F	DEFLECTION YOKE	MTV ⚠
19	TMM4G503	RUBBER WEDGE	MTV
20	TMW4G705	LED HOLDER	
NLA	TNP4G066AC	E BOARD (TX-21W2T ONLY)	MTV ⚠
NLA	TNP4G039AL	T BOARD (TX-21W2T ONLY)	MTV ⚠
NLA	TNP4G066AA	E BOARD	MTV ⚠
NLA	TNP4G067AA	Y BOARD	MTV ⚠
NLA	TNP4G075AA	W BOARD	MTV ⚠
	TPC4G42501	CARTON (S'PORE,HONG KONG)	MTV
	TPC4G42502	CARTON (TC-21W2)	MTV
	TPC4G42506	CARTON (TX-21W2T ONLY)	MTV
	TPD4G1033	CUSHION (TOP)	MTV
	TPD4G2031	CUSHION (BOTTOM)	MTV
	TPE4G14003	LAMI BAG	MTV
	TPE4G14025	SET COVER	MTV
	TQB4G1450	FAN BAG (S PORE)	MTV
	TQB4G1452	FAN BAG (TC-21W2)	MTV
	TQB4G1490	FAN BAG (HONG KONG ONLY)	MTV
	TQB4G1492	FAN BAG (TX-21W2T ONLY)	MTV
21	TSM10032-3	MAGNET	
22	TSN63115-4	PURITY MAGNET	MTV
23a	TSX4G111H	AC POWER CORD (S'PORE,C.I.S)	MTV ⚠
23b	TSX4G117H	AC POWER CORD (HONG KONG ONLY)	MTV ⚠
24	TXFKY01HE2S	CABINET ASSY (S'PORE , HONG KONG ONLY)	MTV
24	TXFKY01HF4V	CABINET ASSY (TC-21W2)	MTV
24	TXFKY01HG4V	CABINET ASSY (TX-21W2T ONLY)	MTV
25	XTBT964Z	SCREW (BACK COVER)	
26	XTB4+12A	SCREW (SPEAKER)	
	RESISTORS		
R102	ERJ6GEYJ223	M 22KOHM,J,1/10W	
R103	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	
R104	ERD25TJ100	C 10OHM, J,1/4W	
R105	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R106	ERJ6GEYJ333	M 33KOHM,J,1/10W	
R115	ERJ6GEYJ393	M 39KOHM,J,1/10W	
R116	ERJ6GEYJ473	M 47KOHM,J,1/10W	
R120	ERJ6GEYJ122	M 1.2KOHM,J,1/10W	
R121	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	
R122	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	
R123	ERJ6GEYJ682	M 6.8KOHM,J,1/10W	
R124	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R125	ERJ6GEYJ182	M 1.8KOHM,J,1/10W	
R126	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R127	ERJ6GEYJ122	M 1.2KOHM,J,1/10W	
R128	ERJ6GEYJ470	M 47OHM,J,1/10W	
R129	ERJ6GEYJ681	M 680OHM,J,1/10W	
R130	ERJ6GEYJ680	M 68OHM,J,1/10W	
R140	ERJ6GEYJ331	M 330OHM,J,1/10W	
R141	ERJ6GEYJ271	M 270OHM,J,1/10W	
R142	ERJ6GEYJ331	M 330OHM,J,1/10W	
R143	ERJ6GEYJ331	M 330OHM,J,1/10W	
R144	ERJ6GEY0R00	M 0OHM,J,1/10W	
R147	ERJ6GEYJ271	M 270OHM,J,1/10W	
R148	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	
R151	ERJ6GEYJ823	M 82KOHM,J,1/10W	
R153	ERJ6GEYJ221	M 220OHM,J,1/10W	
R154	ERJ6GEYJ681	M 680OHM,J,1/10W	
R158	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R159	ERJ6GEYJ223	M 22KOHM,J,1/10W	
R160	ERJ6GEYJ221	M 220OHM,J,1/10W	

Ref.No.	Part No.	Description
R161	ERJ6GEYJ334	M 330KOHM,J,1/10W
R162	ERJ6GEYJ330	M 33OHM,J,1/10W
R163	ERJ6GEYJ332	M 3.3KOHM,J,1/10W
R164	ERDS2TJ271	C 270OHM, J,1/4W
R166	ERJ6GEYJ391	M 390OHM,J,1/10W
R167	ERJ6GEYJ181	M 180OHM,J,1/10W
R168	ERJ6GEY0R00	M 0OHM,J,1/10W
R170	ERJ6GEYJ471	M 470OHM,J,1/10W
R201	ERJ6GEYJ471	M 470OHM,J,1/10W
R202	ERJ6GEYJ102	M 1KOHM,J,1/10W
R203	ERJ6GEYJ391	M 390OHM,J,1/10W
R211	ERJ6GEYJ823	M 82KOHM,J,1/10W
R212	ERJ6GEYJ103	M 10KOHM,J,1/10W
R240	ERJ6GEYJ391	M 390OHM,J,1/10W
R241	ERJ6GEYJ471	M 470OHM,J,1/10W
R242	ERJ6GEYJ471	M 470OHM,J,1/10W
R243	ERJ6GEYJ471	M 470OHM,J,1/10W
R250	ERJ6GEYJ101	M 100OHM,J,1/10W
R251	ERJ6GEYJ221	M 220OHM,J,1/10W
R252	ERJ6GEYJ221	M 220OHM,J,1/10W
R253	ERJ6GEYJ750	M 75OHM, 1/10W
R351	ERG2ANJ123	M 12KOHM, J, 2W
R352	ERG2ANJ123	M 12KOHM, J, 2W
R366	ERDS2TJ331	C 330OHM, J,1/4W
R367	ERDS2TJ331	C 330OHM, J,1/4W
R368	ERDS2TJ331	C 330OHM, J,1/4W
R369	ERDS2TJ332	C 3.3KOHM, J,1/4W
R370	ERDS2TJ332	C 3.3KOHM, J,1/4W
R371	ERDS2TJ332	C 3.3KOHM, J,1/4W
R372	ERDS2TJ101	C 100OHM, J,1/4W
R373	ERDS2TJ101	C 100OHM, J,1/4W
R374	ERDS2TJ101	C 100OHM, J,1/4W
R375	ERDS1TJ272	C 2.7KOHM, J,1/2W
R376	ERG2ANJ123	M 12KOHM, J, 2W
R386	ERDS1TJ272	C 2.7KOHM, J,1/2W
R387	ERDS1TJ272	C 2.7KOHM, J,1/2W
R390	ERDS2TJ102	C 1KOHM, J,1/4W
R402	ERJ6GEYJ362	M 3.6KOHM,J,1/10W
R404	ERJ6GEYJ242	M 2.4KOHM,J,1/10W
R405	ERJ6GEYJ331	M 330OHM,J,1/10W
R406	ERDS1TJ1R5	C 1.5OHM, J,1/2W
R407	ERJ6ENF1180	M 118OHM, 1/10W MTV
R410	ERJ6GEYJ103	M 10KOHM,J,1/10W
R411	ERJ6GEYJ562	M 5.6KOHM,J,1/10W
R412	ERJ6GEYJ472	M 4.7KOHM,J,1/10W
R420	ERJ6GEYJ224	M 220KOHM,J,1/10W
R421	ERJ6GEYJ271	M 270OHM,J,1/10W
R425	ERDS2TJ223	C 22KOHM, J,1/4W
R430	ERJ6GEYJ221	M 220OHM,J,1/10W

Ref.No.	Part No.	Description
R431	ERJ6GEYJ274	M 270KOHM,J,1/10W
R451	ERDS1FJ4R7	C 4.7OHM, J,1/2W
R454	ERDS2TJ821	C 820OHM, J,1/4W
R455	ERJ6GEYJ221	M 220OHM,J,1/10W
R501	ERQ12HJ1R0	F 1OHM, J,1/2W ⚠
R502	ERQ12AJ1R0E	F 1OHM, J,1/2W MTV ⚠
R503	ER025CKF1783	M 178KOHM, F,1/4W
R504	ERJ6GEYJ223	M 22KOHM,J,1/10W
R510	ERJ6GEYJ563	M 56KOHM,J,1/10W MTV
R511	ERJ6GEYJ104	M 100KOHM,J,1/10W
R513	ERJ6GEYJ152	M 1.5KOHM,J,1/10W
R514	ERQ2CJP2R7S	F 2.7OHM, J, 2W ⚠
R515	ERJ6GEYJ393	M 39KOHM,J,1/10W
R516	ERJ6GEYJ222	M 2.2KOHM,J,1/10W
R520	ERJ6GEYJ562	M 5.6KOHM,J,1/10W
R521	ERJ6GEYJ225	M 2.2MOHM, 1/10W
R523	ERJ6GEYJ822	M 8.2KOHM,J,1/10W
R524	ERJ6GEYJ684	M 680KOHM,J,1/10W
R525	ERJ6GEYJ274	M 270KOHM,J,1/10W
R526	ERJ6GEYJ471	M 470OHM,J,1/10W
R530	ERJ6GEYJ331	M 330OHM,J,1/10W
R531	ERJ6GEYJ124	M 120KOHM,J,1/10W
R532	ERJ6GEYJ823	M 82KOHM,J,1/10W
R543	ERJ6GEYJ123	M 12KOHM,J,1/10W
R544	ERJ6GEYJ103	M 10KOHM,J,1/10W
R545	ERJ6GEYJ101	M 100OHM,J,1/10W
R546	ERJ6GEY0R00	M 0OHM,J,1/10W
R547	ERG2ANJ360H	M 36OHM, J, 2W
R548	ERJ6GEYJ102	M 1KOHM,J,1/10W
R549	ERJ6GEYJ182	M 1.8KOHM,J,1/10W
R550	ERG2ANJ331H	M 330OHM, J, 2W MTV
R551	ERQ12AJ101	F 100OHM, J,1/2W ⚠
R552	ERQ1CJP102S	F 1KOHM, J, 1W ⚠
R580	ERD25TJ823	C 82KOHM, J,1/4W
R581	ERJ6GEYJ103	M 10KOHM,J,1/10W
R582	ERD2FAVJ1R5T	C 1.5OHM, J,1/4W MTV
R584	ERJ6GEYJ103	M 10KOHM,J,1/10W
R585	ERJ6GEYJ334	M 330KOHM,J,1/10W
R586	ERJ6GEYJ683	M 68KOHM,J,1/10W
R587	ERJ6GEYJ104	M 100KOHM,J,1/10W
R588	ERJ6GEYJ103	M 10KOHM,J,1/10W
R589	ERJ6GEYJ223	M 22KOHM,J,1/10W
R590	ERJ6ENF1962	M 19.6KOHM, 1/10W MTV
R591	ERJ6ENF1472	M14.7KOHM, 1/10W MTV
R592	ERJ6GEYJ100	M 10OHM,J,1/10W
R605	ERD25TJ100	C 10OHM, J,1/4W
R606	ERD25TJ100	C 10OHM, J,1/4W
R620	ERJ6GEYJ221	M 220OHM,J,1/10W

Ref.No.	Part No.	Description
R621	ERJ6GEYJ471	M 470OHM,J,1/10W
R625	ERJ6GEYJ475	M 4.7MOHM,J,1/10W
R627	ERJ6GEYJ272	M 2.7KOHM,J,1/10W
R628	ERJ6GEYJ915	M 9.1MOHM,J,1/10W MTV
R640	ERJ6GEYJ152	M 1.5KOHM,J,1/10W
R641	ERJ6GEYJ152	M 1.5KOHM,J,1/10W
R642	ERJ6GEYJ152	M 1.5KOHM,J,1/10W
R643	ERJ6GEYJ331	M 330OHM,J,1/10W
R644	ERJ6GEYJ331	M 330OHM,J,1/10W
R645	ERJ6GEYJ331	M 330OHM,J,1/10W
R650	ERJ6GEYJ911	M 910OHM,J,1/10W
R651	ERJ6GEYJ911	M 910OHM,J,1/10W
R652	ERJ6GEYJ911	M 910OHM,J,1/10W
R653	ERJ6GEYJ562	M 5.6KOHM,J,1/10W
R654	ERD25TJ103	C 10KOHM, J,1/4W
R670	ERJ6GEYJ104	M 100KOHM,J,1/10W
R671	ERJ6GEYJ183	M 18KOHM,J,1/10W
R672	ERJ6GEYJ275	M 2.7MOHM,J,1/10W
R674	ERJ6GEYJ151	M 150OHM,J,1/10W
R677	ERJ6GEYJ394	M 390KOHM,J,1/10W
R678	ERJ6GEYJ103	M 10KOHM,J,1/10W
R679	ERJ6GEYJ393	M 39KOHM,J,1/10W
R680	ERJ6GEYJ332	M 3.3KOHM,J,1/10W
R681	ERJ6GEYJ822	M 8.2KOHM,J,1/10W
R801	TAR26NJ2R2Z	W 2.2OHM, J, 7W MTV
R802	ERG2ANJ150	M 15OHM, J, 2W MTV
R803	ERDS1TJ154	C 150KOHM, J,1/2W
R804	ERDS1TJ154	C 150KOHM, J,1/2W
R805	ERDS2TJ393	C 39KOHM, J,1/4W
R806	ERG3ANJ391	M 390OHM, J, 3W
R807	ERC12ZGK335	S 3.3MOHM, K,1/2W
R810	ERDS2TJ103	C 10KOHM, J,1/4W
R811	ERDS1TJ182	C 1.8OHM, J,1/2W
R812	ERDS2TJ751	C 750OHM, J,1/4W
R815	ERG2ANJ470H	M 47OHM, J, 2W
R816	ERG2ANJ102	M 100OHM, J, 2W MTV
R817	ERDS1TJ222	C 2.2KOHM, J,1/2W
R820	ERG7ZJ272	M 2.7KOHM, J, 7W MTV
R821	ERG3SJS822	M 8.2KOHM, J, 3W MTV
R822	ERG1ANJ332H	M 3.3KOHM, J, 1W
R840	ERD75TAJ825	C 8.2MOHM, J,3/4W
R850	ERDS1TJ152	C 1.5KOHM, J,1/2W
R851	ERDS2TJ241	C 240OHM, J,1/4W
R852	ERG2ANJ222H	M 2.2KOHM, J, 2W
R853	ERG2ANJ221H	M 220OHM, J, 2W
R854	ERG2SJS222	M 2200OHM, J, 2W MTV
R855	ERDS2TJ102	C 1KOHM, J,1/4W
R856	ERDS2TJ102	C 1KOHM, J,1/4W
R857	ERDS2TJ202	C 2KOHM, J,1/4W

Ref.No.	Part No.	Description
R860	TSF19401	PROTECTOR
R861	ERX2ANJ3R3H	M 3.3OHM, J, 2W MTV
R862	ERX2ANJ6R2H	M 6.2OHM, J, 2W MTV
R863	ERX2ANJ3R3H	M 3.3OHM, J, 2W MTV
R1051	ERJ6GEYJ102	M 1KOHM,J,1/10W
R1052	ERJ6GEYJ470	M 47OHM,J,1/10W
R1053	ERJ6GEYJ821	M 820OHM,J,1/10W
R1101	ERJ6GEYJ152	M 1.5KOHM,J,1/10W
R1102	ERJ6GEYJ101	M 100OHM,J,1/10W
R1105	ERD25TJ391	C 390OHM, J,1/4W
R1106	ERD25TJ101	C 100OHM, J,1/4W
R1107	ERJ6GEYJ183	M 18KOHM,J,1/10W
R1108	ERJ6GEYJ562	M 5.6KOHM,J,1/10W
R1109	ERD25TJ101	C 100OHM, J,1/4W
R1110	ERJ6GEYJ223	M 22KOHM,J,1/10W
R1111	ERD25TJ331	C 330OHM, J,1/4W
R1115	ERJ6ENF1002	M 10KOHM, 1/10W
R1116	ERJ6ENF2201	M 2.2KOHM, 1/10W
R1117	ERJ6ENF2201	M 2.2KOHM, 1/10W
R1118	ERJ6ENF3301	M 3.3KOHM, 1/10W
R1119	ERJ6ENF4701	M 4.7KOHM, 1/10W
R1120	ERJ6ENF1002	M 10KOHM, 1/10W
R1121	ERJ6GEYJ333	M 33KOHM,J,1/10W
R1122	ERJ6GEYJ103	M 10KOHM,J,1/10W
R1125	ERJ6GEYJ392	M 3.9KOHM,J,1/10W
R1126	ERJ6GEYJ473	M 47KOHM,J,1/10W
R1127	ERJ6GEYJ563	M 56KOHM,J,1/10W MTV
R1130	ERJ6GEYJ182	M 1.8KOHM,J,1/10W
R1132	ERJ6GEYJ101	M 100OHM,J,1/10W
R1140	ERJ6GEYJ101	M 100OHM,J,1/10W
R1141	ERJ6GEYJ101	M 100OHM,J,1/10W
R1143	ERD25TJ101	C 100OHM, J,1/4W
R1145	ERJ6GEYJ222	M 2.2KOHM,J,1/10W
R1146	ERJ6GEYJ103	M 10KOHM,J,1/10W
R1150	ERJ6GEYJ182	M 1.8KOHM,J,1/10W
R1151	ERJ6GEYJ562	M 5.6KOHM,J,1/10W
R1152	ERJ6GEYJ562	M 5.6KOHM,J,1/10W
R1153	ERJ6GEYJ562	M 5.6KOHM,J,1/10W
R1154	ERJ6GEYJ122	M 1.2KOHM,J,1/10W
R1155	ERJ6GEYJ183	M 18KOHM,J,1/10W
R1156	ERD25TJ102	C 1KOHM, J,1/4W
R1157	ERJ6GEYJ101	M 100OHM,J,1/10W
R1158	ERJ6GEYJ101	M 100OHM,J,1/10W
R1160	ERJ6GEYJ683	M 68KOHM,J,1/10W
R1161	ERJ6GEYJ223	M 22KOHM,J,1/10W
R1162	ERJ6ENF1243	M 124KOHM, 1/10W MTV
R1163	ERJ6GEYJ122	M 1.2KOHM,J,1/10W
R1164	ERJ6GEYJ682	M 6.8KOHM,J,1/10W
R1170	ERJ6GEYJ560	M 56OHM,J,1/10W

Ref.No.	Part No.	Description	
R1171	ERJ6GEYJ560	M 56OHM,J,1/10W	
R1172	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	
R1173	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	
R1174	ERDS2TJ470	C 47OHM, J,1/4W	
R1180	ERG3ANJ153H	M 15KOHM, J, 3W	MTV
R1181	ERJ6GEYJ100	M 10OHM,J,1/10W	
R1182	ERJ6GEYJ100	M 10OHM,J,1/10W	
R1183	ERJ6GEYJ101	M 100OHM,J,1/10W	
R1184	ERJ6GEYJ101	M 100OHM,J,1/10W	
R1185	ERJ6GEYJ100	M 10OHM,J,1/10W	
R1187	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R1188	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R1189	ERJ6GEYJ123	M 12KOHM,J,1/10W	
R1190	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R1191	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R1192	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R2301	ERJ6GEYJ562	M 5.6KOHM,J,1/10W	
R2302	ERDS2TJ182	C 1.8KOHM, J,1/4W	
R2304	ERDS2TJ222	C 2.2KOHM, J,1/4W	
R2310	ERDS2TJ1R0	C 1OHM, J,1/4W	
R2311	ERQ2CJP5R6S	F 5.6OHM, J, 2W	⚠
R3001	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	
R3002	ERJ6GEYJ123	M 12KOHM,J,1/10W	
R3003	ERJ6GEYJ101	M 100OHM,J,1/10W	
R3004	ERJ6GEYJ391	M 390OHM,J,1/10W	
R3005	ERJ6GEYJ680	M 68OHM,J,1/10W	
R3006	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R3010	ERJ6GEYJ101	M 100OHM,J,1/10W	
R3011	ERJ6GEYJ393	M 39KOHM,J,1/10W	
	CAPACITORS		
C101	ECA1HM2R2G	E 2.2UF, 50V	
C102	ECQV1H334JM	P 0.33UF, J, 50V	
C103	ECA1HM2R2G	E 2.2UF, 50V	
C104	ECA1HM3R3G	E 3.3UF, 50V	
C105	ECA1HM2R2G	E 2.2UF, 50V	
C107	ECA1CM100G	E 10UF, 16V	
C108	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C110	ECA1CM100G	E 10UF, 16V	
C122	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C124	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C125	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C126	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C127	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C128	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C150	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C151	ECA1HM010G	E 1UF, 50V	
C152	ECA1HMR22G	E 0.22UF, 50V	
C155	ECA1CM470G	E 47UF, 16V	
C156	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV

Ref.No.	Part No.	Description	
C159	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C160	ECA1HM100G	E 10UF, 50V	
C161	ECUX1E104ZFX	C 0.1UF, Z, 25V	MTV
C163	ECUX1H104ZFX	C 0.1UF, Z, 50V	
C165	ECUX1H101JCX	C 100PF, J, 50V	
C168	ECA1HMR33G	E 0.33UF, 50V	MTV
C169	ECUX1H221JCX	C 220PF, J, 50V	MTV
C201	ECUX1C683KBX	P 0.068UF, K, 16V	MTV
C202	ECA1HM3R3G	E 3.3UF, 50V	
C203	ECA1CM100G	E 10UF, 16V	
C204	ECUX1H222KBN	C 2200PF, K,50V	MTV
C211	ECEA1HN010S	E 1UF, 50V	
C240	ECUX1H560JCX	C 56PF, J, 50V	
C241	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C350	ECCF1H331J	C 330PF, J, 50V	
C351	ECCF1H561J	C 560PF, J, 50V	
C352	ECCF1H471J	C 470PF, J, 50V	
C353	ECCF1H561J	C 560PF, J, 50V	
C354	ECKD3D821KBN	C 820PF, K, 2KV	MTV
C356	ECKD2H103PU	C 0.01UF, P,500V	
C357	ECQM4223JZ	P 0.022UF, J,400V	
C390	ECA1CM221G	E 220UF, 16V	
C401	ECA1VM102G	E 1000UF, 35V	
C402	ECA1HM470G	E 47UF, 50V	
C403	ECA1VM222G	E 2200UF, 35V	
C405	ECUX1H102KBX	C 1000PF, K, 50V	
C406	ECUX1H102KBX	C 1000PF, K, 50V	
C410	ECA1HMR22G	E 0.22UF, 50V	
C420	ECUX1E104KBX	C 0.1UF, K, 25V	MTV
C425	ECSF1EE105V	T 1UF, 25V	MTV
C430	ECUX1H103KBX	C 0.01UF, K, 50V	
C431	ECA1CM100G	E 10UF, 16V	
C451	ECQE1224KF3	P 0.22UF, K,100V	MTV
C452	ECA1VM101G	E 100UF, 35V	
C453	ECQB1682KF3	P 0.68UF, K,100V	MTV
C501	ECA1HM0R1G	E 0.1UF, 50V	
C503	ECKD2H471KB2	C 470PF, K,500V	
C504	ECKD2H471KB2	C 470PF, K,500V	
C505	ECKD2H561KB2	C 560PF, K,500V	
C506	ECEA2EU220	E 22UF, 250V	
C507	ECA1EM471G	E 470UF, 25V	
C508	ECA1VM332G	E 3300UF, 35V	
C510	ECA1AM470G	E 47UF, 10V	
C519	ECUX1H330JCX	C 33PF, J, 50V	MTV
C520	ECA1HM010G	E 1UF, 50V	
C521	ECUX1H103KBG	C 0.01UF, K, 50V	MTV
C522	ECQB1H822JF	P 8200PF, J, 50V	
C525	ECA1HM3R3G	E 3.3UF, 50V	
C526	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV

Ref.No.	Part No.	Description
C530	ECUX1H122KBN	C 1200PF, K, 50V
C531	ECA1HM010G	E 1UF, 50V
C543	ECA1CM221G	E 220UF, 16V
C546	ECA1HM010G	E 1UF, 50V
C548	ECQB1H473JF	P 0.047UF, J, 50V
C551	ECKD3D471JBP	C 470PF, J, 2KV MTV
C552	ECWH12H153JS	P 0.015UF,J,1.2KV
C553	ECQM4473JZ	P 0.047UF, J,400V
C555	ECQM4273JZ	P 0.027UF, 400V
C558	ECKD3D272JBP	C 2700PF, J, 2KV MTV
C559	TAC7A2D824JC	P 0.82UF, J,200V MTV
C560	TAC7A2D474JC	P 0.47UF, J,200V MTV
C580	ECA1AM330B	E 33UF, 10V MTV
C581	ECA1JM100B	E 10UF, 63V MTV
C582	ECA1HM010G	E 1UF, 50V
C585	ECUX1H104ZFX	C 0.1UF, Z, 50V
C590	ECA1VM101G	E 100UF, 35V
C591	ECKD2H331KB2	C 330PF, K,500V
C601	ECA1HMR22G	E 0.22UF, 50V
C604	ECUX1H680JCX	C 68PF, J, 50V
C605	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C606	ECA1CM470G	E 47UF, 16V
C610	EEUFA1A102B	E 1000UF, 10V MTV
C611	ECUX1E104ZFX	C 0.1UF, Z, 25V MTV
C612	ECUX1E104ZFX	C 0.1UF, Z, 25V MTV
C613	ECUX1E104ZFX	C 0.1UF, Z, 25V MTV
C615	ECA0JM101G	E 100UF, 6.3V
C616	ECUX1H223ZFX	C 0.022UF, Z, 50V
C620	ECUX1H223KBX	C 0.022UF, K, 50V
C621	ECUX1H223KBX	C 0.022UF, K, 50V
C622	ECUX1C224KBX	P 0.22UF, K, 16V MTV
C625	ECUX1H220JCX	C 22PF, J, 50V MTV
C626	ECUX1E104KBX	C 0.1UF, K, 25V MTV
C627	ECA1HMR47G	E 0.47UF, 50V
C628	ECUX1H153KBX	C 0.015UF, K, 50V
C630	ECUX1H120JCX	C 12PF, J, 50V
C633	ECA1AM221G	E 220UF, 10V
C634	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C636	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C637	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C640	ECUX1H330JCX	C 33PF, J, 50V MTV
C641	ECUX1H330JCX	C 33PF, J, 50V MTV
C642	ECUX1H330JCX	C 33PF, J, 50V MTV
C671	ECA1HM470G	E 47UF, 50V
C672	ECUX1H223ZFX	C 0.022UF, Z, 50V
C673	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C674	ECQV1H105JM	P 1UF, 50V
C675	ECQV1H224JM	P 0.22UF, J, 50V
C677	ECUX1H560JCX	C 56PF, J, 50V

Ref.No.	Part No.	Description
C678	ECUX1H390JCX	C 39PF, J, 50V
C801	ECQU2A224MN	P 0.22UF, M,250V ⚠
C802	ECQU2A104MN	P 0.1UF, M,250V ⚠
C803	ECKCNA471MBB	C 470PF, M, ⚠
C805	ECKD2H103PU	C 0.01UF, P,500V
C806	ECKD2H472KB2	C 4700PF, K,500V
C807	ECKD2H472KB2	C 4700PF, K,500V
C808	ECKD2H472KB2	C 4700PF, K,500V
C809	ECKD2H472KB2	C 4700PF, K,500V
C810	EC0S2GP331DB	E 330UF, 400V MTV
C814	ECKD3D102KBP	C 1000PF, K, 2KV
C815	ECQV1H224JM	P 0.22UF, J, 50V
C816	ECQB1H333JF	P 0.033UF, J, 50V
C817	ECQB1H473JF	P 0.047UF, J, 50V
C818	ECA1AM101G	E 100UF, 10V
C820	ECQB1H223JF	P 0.022UF, J, 50V
C821	ECQB1H273JF	P 0.027UF, J, 50V
C822	ECKD3D821KBP	C 820PF, K, 2KV
C823	EC0S2CA102CB	E 1000UF, 160V MTV
C824	ECKD3D821KBP	C 820PF, K, 2KV
C825	ECKD3D102KBP	C 1000PF, K, 2KV
C828	ECA1EM331B	E 330UF, 25V MTV
C829	ECA1CM101G	E 100UF, 16V
C830	ECA0JM101G	E 100UF, 6.3V
C831	ECA160V33UE	E 33UF, 160V MTV
C840	ECKCNA222MEB	C 2200PF, M, ⚠
C850	ECA1EHG102	E 1000UF, 25V MTV ⚠
C851	ECKD2H471KB2	C 470PF, K,500V
C852	ECKD3A471KBP	C 470PF, K, 1KV
C853	ECA1HHG471	E 470UF, 50V MTV
C854	ECA1CM100G	E 10UF, 16V
C858	ECQB1H473JF	P 0.047UF, J, 50V
C870	ECA1VM101G	E 100UF, 35V
C871	ECA0JM101G	E 100UF, 6.3V
C1051	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C1052	ECA1AM221G	E 220UF, 10V
C1053	ECUX1H101JRX	C 100PF, J, 50V
C1101	ECUX1H471JCX	C 470PF, J, 50V
C1102	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C1103	ECUX1H563KBX	C 0.056UF, K, 50V MTV
C1106	ECA1HM2R2G	E 2.2UF, 50V
C1120	ECA1CM100G	E 10UF, 16V
C1125	ECA1HM2R2G	E 2.2UF, 50V
C1130	ECA1HM4R7G	E 4.7UF, 50V
C1131	ECA1CM470G	E 47UF, 16V
C1135	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C1137	ECA1CM220G	E 22UF, 16V
C1138	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV

Ref.No.	Part No.	Description	
C1145	ECUX1H681JCX	C 680PF, J, 50V	
C1146	ECUX1H101JCX	C 100PF, J, 50V	
C1149	ECUX1H560JCX	C 56PF, J, 50V	
C1151	ECUX1H820JCX	C 82PF, J, 50V	
C1152	ECUX1H820JCX	C 82PF, J, 50V	
C1153	ECUX1H820JCX	C 82PF, J, 50V	
C1154	ECUX1H820JCX	C 82PF, J, 50V	
C1155	ECUX1H221JCX	C 220PF, J, 50V	MTV
C1156	ECUX1H102JCX	C 1000PF, J, 50V	
C1157	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C1160	ECA1CM471G	E 470UF, 16V	
C1161	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C1170	ECUX1H101JCX	C 100PF, J, 50V	
C1171	ECUX1H101JCX	C 100PF, J, 50V	
C1172	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C1173	ECA1CM100G	E 10UF, 16V	
C1180	ECA1CM470G	E 47UF, 16V	
C1181	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C1182	ECA1HM330G	E 33UF, 50V	
C1183	ECQV1H474JM	P 0.47UF, J, 50V	
C1184	ECQV1H474JM	P 0.47UF, J, 50V	
C2301	ECUX1H103KBX	C 0.01UF, K, 50V	
C2302	ECA1CM100G	E 10UF, 16V	
C2305	ECA1CM100G	E 10UF, 16V	
C2306	ECA1CM470G	E 47UF, 16V	
C2307	ECA1EM222G	E 2200UF, 25V	
C2308	ECUX1H103ZFX	C 0.01UF, Z, 50V	MTV
C2309	ECA1EM471G	E 470UF, 25V	
C2310	ECQV1H224JM	P 0.22UF, J, 50V	
C2311	ECQV1H224JM	P 0.22UF, J, 50V	
C2312	ECA1VM470G	E 47UF, 35V	
C3001	ECA1CM470G	E 47UF, 16V	
C3002	ECUX1H471JCX	C 470PF, J, 50V	
C3003	ECA1CM471G	E 470UF, 16V	
	COILS		
L121	TLXR56MD01	PEAKING COIL	MTV
L122	TLT082K991K	PEAKING COIL 8.2U	
L140	TLT180K991K	PEAKING COIL 18U	
L141	TLT100K991K	PEAKING COIL 10U	
L142	TLT180K991K	PEAKING COIL 18U	
L143	TLT180K991K	PEAKING COIL 18U	
L150	TLT101K991K	PEAKING COIL 100U	
L167	EQV7EN212P	COIL	MTV
L240	TLT100K991K	PEAKING COIL 10U	
L401	EXCELSA39V	BEAD CORE	MTV
L402	EXCELSA35T	BEAD CORE	MTV
L501	EXCELSA35T	BEAD CORE	MTV
L551	TSC925-4	CHOKE COIL	

Ref.No.	Part No.	Description	
L552	TSK1002	COIL	
L553	ELH5L713	COIL	MTV
L554	LHL08TB682J	CHOKE COIL	MTV
L555	EXCELSA39V	BEAD CORE	MTV
L556	EXCELSA35T	BEAD CORE	MTV
L580	EXCELSA39V	BEAD CORE	MTV
L611	EXCELSR35T	BEAD CORE	MTV
L612	TLXR47MD01	PEAKING COIL	MTV
L620	EXCELSA39V	BEAD CORE	MTV
L640	TLUABTA100	PEAKING COIL	MTV
L641	TLUABTA100	PEAKING COIL	MTV
L642	TLUABTA100	PEAKING COIL	MTV
L649	TLUABTA3R3	PEAKING COIL	MTV
L675	TLT220K991K	PEAKING COIL 22U	
L801	ELF18D666P	LINE FILTER	MTV
L810	TSK1002	COIL	
L850	EXCELSA35T	BEAD CORE	MTV
L870	EXCELSR35T	BEAD CORE	MTV
L1101	TLUABTA100	PEAKING COIL	MTV
L1102	TLUABTA100	PEAKING COIL	MTV
L1104	TLUABTA100	PEAKING COIL	MTV
L1135	TLUABTA100	PEAKING COIL	MTV
L1140	TLUABTA100	PEAKING COIL	MTV
L1150	TLUABTA100	PEAKING COIL	MTV
L1151	TLUABTA100	PEAKING COIL	MTV
L1152	EXCELDR25V	CORE	MTV
J212	EXCELSA35T	BEAD CORE	MTV
J273	TSK1002	COIL	
J277	EXCELSA35T	BEAD CORE	MTV
J343	EXCELSA39V	BEAD CORE	MTV
	TRANSFORMERS		
T501	ZTFK82003A	FLYBACK TRANS	MTV ⚠
T550	TLH15462M	COIL	
TA801	ETS29AK286NC	SWITCHING TRANS	MTV
	DIODES		
D101	MA165	DIODE	
D120	MA858	DIODE	
D391	MA165	DIODE	
D392	MA165	DIODE	
D393	MA165	DIODE	
D394	MA165	DIODE	
D401	ERA15-01	DIODE	
D402	MA4360M	DIODE	
D403	MTZJ4.7C	ZENER DIODE	
D404	MA165	DIODE	
D501	TVSEU2	DIODE	
D502	TVSEU2	DIODE	
D503	TVSEU2	DIODE	
D504	MTZJ36A	ZENER DIODE	MTV

Ref.No.	Part No.	Description	
D510	TVSEU2	DIODE	
D512	MTZJ5.6A	ZENER DIODE	MTV
D517	MTZJ10D	ZENER DIODE	MTV
D545	MA171	DIODE	
D551	ERB06-15	DIODE	
D552	TVSRU2AM	DIODE	
D580	D1NL20UV70	DIODE	MTV
D581	MTZJ36D	ZENER DIODE	
D590	MA4108J	DIODE	
D591	MA171	DIODE	
D801	TAP4GA0003	POSISTOR	MTV
D802	D4SB80Z	DIODE	
D803	MTZJ12C	ZENER DIODE	MTV
D804	D1NL20UV70	DIODE	MTV
D805	MTZJ15C	ZENER DIODE	
D806	MTZJ5.1C	ZENER DIODE	MTV
D815	D1NL20UV70	DIODE	MTV
D816	D1NL20UV70	DIODE	MTV
D817	S2L60V61	DIODE	MTV
D820	TVSSR2KS	DIODE	
D821	0N3131LF	PHOTO COUPLER	MTV
D840	PC123F2	DIODE	
D850	D1NL20UV70	DIODE	MTV
D851	MTZJ2.4B	ZENER DIODE	
D852	EU02	DIODE	
D853	MTZJ8.2C	ZENER DIODE	
D854	MA27T-A	DIODE	
D870	D1NL20UV70	DIODE	MTV
D871	MTZJ5.6C	ZENER DIODE	MTV
D1051	EL333ID-F45R	LED	
D1120	MA165	DIODE	
D1145	MA165	DIODE	
D1160	MTZJ5.6A	ZENER DIODE	MTV
D1170	MTZJ6.8C	ZENER DIODE	
D1171	MTZJ6.8C	ZENER DIODE	
	INTEGRATED CIRCUITS		
IC140	TVSTC4052BP	C-MOS LOGIC IC	
IC401	LA7840	IC	MTV
IC601	M52770SP	LINEAR IC	MTV
IC670	AN5637	LINEAR IC	MTV
IC801	SE090N	IC	
IC850	AN78M05LB	LINEAR IC	MTV
IC851	AN78M09LB	LINEAR IC	MTV
IC852	AN78M05LB	LINEAR IC	MTV
IC1051	GP1U282Q	REMOCON RECEIVER	
IC1101	MN1871681T7R	MOS IC	MTV
IC1102	24C04AIPA21	MOS IC (EEPROM 4KBIT)	
IC1103	S-80741AL-Z	LINEAR IC	
IC1105	BA225	IC	MTV
IC1180	AN5071	LINEAR IC	
IC2301	LA4289	IC	MTV
	TRANSISTORS		
Q101	2SD601ATX	TRANSISTOR	MTV
Q120	2SD601ATX	TRANSISTOR	MTV
Ref.No.	**Part No.**	**Description**	
Q121	2SC2188	TRANSISTOR	
Q140	2SD601ATX	TRANSISTOR	MTV
Q160	2SB709ATX	TRANSISTOR	MTV
Q161	2SB709ATX	TRANSISTOR	MTV
Q351	2SC2258	TRANSISTOR	
Q352	2SC2258	TRANSISTOR	
Q354	2SC2258	TRANSISTOR	
Q390	2SA564A-R	TRANSISTOR	
Q401	2SD601ATX	TRANSISTOR	MTV
Q548	2SD601ATX	TRANSISTOR	MTV
Q549	2SD1275A	TRANSISTOR	
Q551	2SD2499	TRANSISTOR	MTV
Q580	2SB709ATX	TRANSISTOR	MTV
Q581	2SB709ATX	TRANSISTOR	MTV
Q670	2SD601ATX	TRANSISTOR	MTV
Q671	2SD601ATX	TRANSISTOR	MTV
Q801	2SC5241	TRANSISTOR	MTV
Q802	2SD789ETZ	TRANSISTOR	MTV
Q803	2SD789ETZ	TRANSISTOR	MTV
Q804	2SC2785H-T	TRANSISTOR	MTV
Q850	2SC2785H-T	TRANSISTOR	MTV
Q851	2SC2785H-T	TRANSISTOR	MTV
Q852	2SD1275A	TRANSISTOR	
Q1130	2SD601ATX	TRANSISTOR	MTV
Q1145	2SD601ATX	TRANSISTOR	MTV
Q1150	2SD601ATX	TRANSISTOR	MTV
Q1180	2SD601ATX	TRANSISTOR	MTV
Q2301	2SB709ATX	TRANSISTOR	MTV
Q3001	2SD601ATX	TRANSISTOR	MTV
	OTHERS		
E32	TJS1A9780	5P CONNECTOR	
E.22	TJS3A9650	CONNECTOR	MTV
E.33	TJS3A9650	CONNECTOR	MTV
F801	XBA2C31TR0	FUSE 250V 3.15A	⚠
JA5	ERJ6GEY0R00	M 0OHM,J,1/10W	
JA6	ERJ6GEY0R00	M 0OHM,J,1/10W	
JA11	ERJ6GEY0R00	M 0OHM,J,1/10W	
JA12	ERJ6GEY0R00	M 0OHM,J,1/10W	
JA13	ERJ6GEY0R00	M 0OHM,J,1/10W	
JA14	ERJ6GEY0R00	M 0OHM,J,1/10W	
JA15	ERJ6GEY0R00	M 0OHM,J,1/10W	
JA16	ERJ6GEY0R00	M 0OHM,J,1/10W	
JA17	ERJ6GEY0R00	M 0OHM,J,1/10W	
JA20	ERJ6GEY0R00	M 0OHM,J,1/10W	

Ref.No.	Part No.	Description	
JA21	ERJ6GEY0R00	M 0OHM,J,1/10W	
JA22	ERJ6GEY0R00	M 0OHM,J,1/10W	
JA30	ERJ6GEY0R00	M 0OHM,J,1/10W	
JK.1	TJB4G605	FRONT AV TERMINAL	MTV
JK.2	TJB18637	AV TERMINAL	
JK.21	TJS1A5050	CRT SOCKET	⚠
JS654	ERJ6GEY0R00	M 0OHM,J,1/10W	
JS672	ERJ6GEY0R00	M 0OHM,J,1/10W	
JS1053	ERJ6GEY0R00	M 0OHM,J,1/10W	
JS1120	ERJ6GEY0R00	M 0OHM,J,1/10W	
S801	ESB91232A	SWITCH	⚠
S1101	EVQ21405R	SWITCH	
S1102	EVQ21405R	SWITCH	
S1103	EVQ21405R	SWITCH	
S1104	EVQ21405R	SWITCH	
S1105	EVQ21405R	SWITCH	
S1106	EVQ21405R	SWITCH	
TNR1	ENV59D22F1	TUNER	⚠
X120	K6267K	SAW FILTER	MTV
X140	EFCS4R5MW5	CERAMIC FILTER	
X141	EFCS5M7MW3	CERAMIC FILTER	
X142	EFCS6R5MW5	CERAMIC FILTER	
X143	EFCS6R0MW5	CERAMIC FILTER	
X240	EFCS6R5MS5	CERAMIC FILTER	MTV
X241	EFCS4R5MS5	FILTER	MTV
X242	EFCS6R0MS5	CERAMIC FILTER	
X243	EFCS5R5MS5	CERAMIC FILTER	
X520	TAFCSB503F18	CERAMIC RESONATOR	MTV
X625	TS816M32T	CRYSTAL OSC	MTV
X626	TSS4GA001T	CRYSTAL OSCILLATOR	MTV
X1160	EF0EC1205B4	CERAMIC RESONATOR	
Y.32	TJS3A9660	CONNECTOR	MTV
Y.33	TJS3A9650	CONNECTOR	MTV
W-E32	TJS2A8340	CONNECTOR	
W-Y32	TJS3A9660	CONNECTOR	MTV

Replacement Parts List

Ref.No.	Part No.	Description
	RESISTORS	
R102	ERJ6GEYJ223	M 22KOHM,J,1/10W
R103	ERJ6GEYJ222	M 2.2KOHM,J,1/10W
R104	ERD25TJ100	C 10OHM, J,1/4W
R105	ERJ6GEYJ103	M 10KOHM,J,1/10W
R106	ERJ6GEYJ333	M 33KOHM,J,1/10W
R115	ERJ6GEYJ393	M 39KOHM,J,1/10W
R116	ERJ6GEYJ473	M 47KOHM,J,1/10W
R120	ERJ6GEYJ122	M 1.2KOHM,J,1/10W
R121	ERJ6GEYJ222	M 2.2KOHM,J,1/10W
R122	ERJ6GEYJ222	M 2.2KOHM,J,1/10W
R123	ERJ6GEYJ682	M 6.8KOHM,J,1/10W
R124	ERJ6GEYJ103	M 10KOHM,J,1/10W
R125	ERJ6GEYJ182	M 1.8KOHM,J,1/10W
R126	ERJ6GEYJ472	M 4.7KOHM,J,1/10W
R127	ERJ6GEYJ122	M 1.2KOHM,J,1/10W
R128	ERJ6GEYJ470	M 47OHM,J,1/10W
R129	ERJ6GEYJ681	M 680OHM,J,1/10W
R130	ERJ6GEYJ680	M 68OHM,J,1/10W
R140	ERJ6GEYJ331	M 330OHM,J,1/10W
R141	ERJ6GEYJ271	M 270OHM,J,1/10W
R142	ERJ6GEYJ331	M 330OHM,J,1/10W
R143	ERJ6GEYJ331	M 330OHM,J,1/10W
R144	ERJ6GEY0R00	M 0OHM,J,1/10W
R147	ERJ6GEYJ271	M 270OHM,J,1/10W
R148	ERJ6GEYJ222	M 2.2KOHM,J,1/10W
R151	ERJ6GEYJ823	M 82KOHM,J,1/10W
R153	ERJ6GEYJ221	M 220OHM,J,1/10W
R154	ERJ6GEYJ681	M 680OHM,J,1/10W
R158	ERJ6GEYJ472	M 4.7KOHM,J,1/10W
R159	ERJ6GEYJ223	M 22KOHM,J,1/10W
R160	ERJ6GEYJ221	M 220OHM,J,1/10W
R161	ERJ6GEYJ334	M 330KOHM,J,1/10W
R162	ERJ6GEYJ330	M 33OHM,J,1/10W
R163	ERJ6GEYJ332	M 3.3KOHM,J,1/10W
R164	ERDS2TJ271	C 270OHM, J,1/4W
R166	ERJ6GEYJ391	M 390OHM,J,1/10W
R167	ERJ6GEYJ181	M 180OHM,J,1/10W
R168	ERJ6GEY0R00	M 0OHM,J,1/10W
R170	ERJ6GEYJ471	M 470OHM,J,1/10W
R201	ERJ6GEYJ471	M 470OHM,J,1/10W
R202	ERJ6GEYJ102	M 1KOHM,J,1/10W
R203	ERJ6GEYJ391	M 390OHM,J,1/10W
R211	ERJ6GEYJ823	M 82KOHM,J,1/10W
R212	ERJ6GEYJ103	M 10KOHM,J,1/10W
R240	ERJ6GEYJ391	M 390OHM,J,1/10W
R241	ERJ6GEYJ471	M 470OHM,J,1/10W
R242	ERJ6GEYJ471	M 470OHM,J,1/10W

Ref.No.	Part No.	Description
R243	ERJ6GEYJ471	M 470OHM,J,1/10W
R250	ERJ6GEYJ101	M 100OHM,J,1/10W
R251	ERJ6GEYJ221	M 220OHM,J,1/10W
R252	ERJ6GEYJ221	M 220OHM,J,1/10W
R253	ERJ6GEYJ750	M 75OHM, 1/10W
R351	ERG2ANJ123	M 12KOHM, J, 2W
R352	ERG2ANJ123	M 12KOHM, J, 2W
R366	ERDS2TJ331	C 330OHM, J,1/4W
R367	ERDS2TJ331	C 330OHM, J,1/4W
R368	ERDS2TJ331	C 330OHM, J,1/4W
R369	ERDS2TJ332	C 3.3KOHM, J,1/4W
R370	ERDS2TJ332	C 3.3KOHM, J,1/4W
R371	ERDS2TJ332	C 3.3KOHM, J,1/4W
R372	ERDS2TJ101	C 100OHM, J,1/4W
R373	ERDS2TJ101	C 100OHM, J,1/4W
R374	ERDS2TJ101	C 100OHM, J,1/4W
R375	ERDS1TJ272	C 2.7KOHM, J,1/2W
R376	ERG2ANJ123	M 12KOHM, J, 2W
R386	ERDS1TJ272	C 2.7KOHM, J,1/2W
R387	ERDS1TJ272	C 2.7KOHM, J,1/2W
R390	ERDS2TJ102	C 1KOHM, J,1/4W
R402	ERJ6GEYJ182	M 1.8KOHM,J,1/10W
R404	ERJ6GEYJ242	M 2.4KOHM,J,1/10W
R405	ERJ6GEYJ331	M 330OHM,J,1/10W
R406	ERDS1TJ1R5	C 1.5OHM, J,1/2W
R407	ERJ6GEYJ151	M 150OHM,J,1/10W
R410	ERJ6GEYJ103	M 10KOHM,J,1/10W
R411	ERJ6GEYJ562	M 5.6KOHM,J,1/10W
R412	ERJ6GEYJ472	M 4.7KOHM,J,1/10W
R420	ERJ6GEYJ224	M 220KOHM,J,1/10W
R421	ERJ6GEYJ271	M 270OHM,J,1/10W
R425	ERDS2TJ223	C 22KOHM, J,1/4W
R430	ERJ6GEYJ221	M 220OHM,J,1/10W
R431	ERJ6GEYJ224	M 220KOHM,J,1/10W
R451	ERDS1FJ4R7	C 4.7OHM, J,1/2W
R454	ERDS2TJ102	C 1KOHM, J,1/4W
R455	ERJ6GEYJ221	M 220OHM,J,1/10W
R501	ERQ12HJ1R0	F 1OHM, J,1/2W
R502	ERQ12AJ1R0E	F 1OHM, J,1/2W MTV
R503	ER025CKF1783	M 178KOHM, F,1/4W
R504	ERJ6GEYJ223	M 22KOHM,J,1/10W
R510	ERJ6GEYJ563	M 56KOHM,J,1/10W MTV
R511	ERJ6GEYJ104	M 100KOHM,J,1/10W
R513	ERJ6GEYJ152	M 1.5KOHM,J,1/10W
R514	ERQ2CJP2R7S	F 2.7OHM, J, 2W
R515	ERJ6GEYJ393	M 39KOHM,J,1/10W
R516	ERJ6GEYJ222	M 2.2KOHM,J,1/10W
R520	ERJ6GEYJ562	M 5.6KOHM,J,1/10W

Ref.No.	Part No.	Description
R521	ERJ6GEYJ225	M 2.2MOHM, 1/10W
R523	ERJ6GEYJ822	M 8.2KOHM,J,1/10W
R524	ERJ6GEYJ684	M 680KOHM,J,1/10W
R525	ERJ6GEYJ274	M 270KOHM,J,1/10W
R526	ERJ6GEYJ471	M 470OHM,J,1/10W
R530	ERJ6GEYJ331	M 330OHM,J,1/10W
R531	ERJ6GEYJ124	M 120KOHM,J,1/10W
R532	ERJ6GEYJ823	M 82KOHM,J,1/10W
R543	ERJ6GEYJ123	M 12KOHM,J,1/10W
R544	ERJ6GEYJ103	M 10KOHM,J,1/10W
R545	ERJ6GEYJ101	M 100OHM,J,1/10W
R546	ERJ6GEY0R00	M 0OHM,J,1/10W
R547	ERG2ANJ360H	M 36OHM, J, 2W
R548	ERJ6GEYJ102	M 1KOHM,J,1/10W
R549	ERJ6GEYJ182	M 1.8KOHM,J,1/10W
R550	ERG2ANJ331H	M 330OHM, J, 2W MTV
R551	ERQ12AJ101	F 100OHM, J,1/2W
R552	ERQ1CJP102S	F 1KOHM, J, 1W
R580	ERD25TJ823	C 82KOHM, J,1/4W
R581	ERJ6GEYJ103	M 10KOHM,J,1/10W
R582	ERD2FAVJ1R5T	C 1.5OHM, J,1/4W MTV
R584	ERJ6GEYJ103	M 10KOHM,J,1/10W
R585	ERJ6GEYJ334	M 330KOHM,J,1/10W
R586	ERJ6GEYJ683	M 68KOHM,J,1/10W
R587	ERJ6GEYJ104	M 100KOHM,J,1/10W
R588	ERJ6GEYJ103	M 10KOHM,J,1/10W
R589	ERJ6GEYJ223	M 22KOHM,J,1/10W
R590	ERJ6ENF1962	M 19.6KOHM, 1/10W MTV
R591	ERJ6ENF1472	M14.7KOHM, 1/10W MTV
R592	ERJ6GEYJ100	M 10OHM,J,1/10W
R605	ERD25TJ100	C 10OHM, J,1/4W
R606	ERD25TJ100	C 10OHM, J,1/4W
R620	ERJ6GEYJ221	M 220OHM,J,1/10W
R621	ERJ6GEYJ471	M 470OHM,J,1/10W
R625	ERJ6GEYJ475	M 4.7MOHM,J,1/10W
R627	ERJ6GEYJ272	M 2.7KOHM,J,1/10W
R628	ERJ6GEYJ915	M 9.1MOHM,J,1/10W MTV
R640	ERJ6GEYJ152	M 1.5KOHM,J,1/10W
R641	ERJ6GEYJ152	M 1.5KOHM,J,1/10W
R642	ERJ6GEYJ152	M 1.5KOHM,J,1/10W
R643	ERJ6GEYJ331	M 330OHM,J,1/10W
R644	ERJ6GEYJ331	M 330OHM,J,1/10W
R645	ERJ6GEYJ331	M 330OHM,J,1/10W
R650	ERJ6GEYJ911	M 910OHM,J,1/10W
R651	ERJ6GEYJ911	M 910OHM,J,1/10W
R652	ERJ6GEYJ911	M 910OHM,J,1/10W
R653	ERJ6GEYJ562	M 5.6KOHM,J,1/10W
R654	ERD25TJ472	C 4.7KOHM, J,1/4W
R670	ERJ6GEYJ104	M 100KOHM,J,1/10W

Ref.No.	Part No.	Description
R671	ERJ6GEYJ183	M 18KOHM,J,1/10W
R672	ERJ6GEYJ275	M 2.7MOHM,J,1/10W
R674	ERJ6GEYJ151	M 150OHM,J,1/10W
R677	ERJ6GEYJ394	M 390KOHM,J,1/10W
R678	ERJ6GEYJ103	M 10KOHM,J,1/10W
R679	ERJ6GEYJ393	M 39KOHM,J,1/10W
R680	ERJ6GEYJ332	M 3.3KOHM,J,1/10W
R681	ERJ6GEYJ822	M 8.2KOHM,J,1/10W
R801	TAR26NJ2R2Z	W 2.2OHM, J, 7W MTV
R802	ERG2ANJ150	M 15OHM, J, 2W MTV
R803	ERDS1TJ154	C 150KOHM, J,1/2W
R804	ERDS1TJ154	C 150KOHM, J,1/2W
R805	ERDS2TJ393	C 39KOHM, J,1/4W
R806	ERG3ANJ391	M 390OHM, J, 3W MTV
R807	ERC12ZGK335	S 3.3MOHM, K,1/2W
R810	ERDS2TJ103	C 10KOHM, J,1/4W
R811	ERDS1TJ202	C 2KOHM, J,1/2W
R812	ERDS2TJ751	C 750OHM, J,1/4W
R815	ERG2ANJ470H	M 47OHM, J, 2W
R816	ERG2ANJ102	M 100OHM, J, 2W MTV
R817	ERDS1TJ222	C 2.2KOHM, J,1/2W
R820	ERG7ZJ272	M 2.7KOHM, J, 7W MTV
R821	ERG3SJS822	M 8.2KOHM, J, 3W MTV
R822	ERG1ANJ332H	M 3.3KOHM, J, 1W MTV
R840	ERD75TAJ825	C 8.2MOHM, J,3/4W
R850	ERDS1TJ152	C 1.5KOHM, J,1/2W
R851	ERDS2TJ241	C 240OHM, J,1/4W
R852	ERG2ANJ222H	M 2.2KOHM, J, 2W
R853	ERG2ANJ221H	M 220OHM, J, 2W
R854	ERG2SJS222	M 2200OHM, J, 2W MTV
R855	ERDS2TJ102	C 1KOHM, J,1/4W
R856	ERDS2TJ102	C 1KOHM, J,1/4W
R857	ERDS2TJ202	C 2KOHM, J,1/4W
R860	TSF19401	PROTECTOR
R861	ERX2ANJ3R3H	M 3.3OHM, J, 2W MTV
R862	ERX2ANJ6R2H	M 6.2OHM, J, 2W MTV
R863	ERX2ANJ3R3H	M 3.3OHM, J, 2W MTV
R1051	ERJ6GEYJ102	M 1KOHM,J,1/10W
R1052	ERJ6GEYJ470	M 47OHM,J,1/10W
R1053	ERJ6GEYJ821	M 820OHM,J,1/10W
R1101	ERJ6GEYJ152	M 1.5KOHM,J,1/10W
R1102	ERJ6GEYJ101	M 100OHM,J,1/10W
R1105	ERD25TJ391	C 390OHM, J,1/4W
R1106	ERD25TJ101	C 100OHM, J,1/4W
R1107	ERJ6GEYJ183	M 18KOHM,J,1/10W
R1108	ERJ6GEYJ562	M 5.6KOHM,J,1/10W
R1109	ERD25TJ101	C 100OHM, J,1/4W
R1110	ERJ6GEYJ223	M 22KOHM,J,1/10W
R1111	ERD25TJ331	C 330OHM, J,1/4W

Ref.No.	Part No.	Description
R1115	ERJ6ENF1002	M 10KOHM, 1/10W
R1116	ERJ6ENF2201	M 2.2KOHM, 1/10W
R1117	ERJ6ENF2201	M 2.2KOHM, 1/10W
R1118	ERJ6ENF3301	M 3.3KOHM, 1/10W
R1119	ERJ6ENF4701	M 4.7KOHM, 1/10W
R1120	ERJ6ENF1002	M 10KOHM, 1/10W
R1121	ERJ6GEYJ333	M 33KOHM,J,1/10W
R1122	ERJ6GEYJ103	M 10KOHM,J,1/10W
R1125	ERJ6GEYJ392	M 3.9KOHM,J,1/10W
R1126	ERJ6GEYJ473	M 47KOHM,J,1/10W
R1127	ERJ6GEYJ563	M 56KOHM,J,1/10W MTV
R1130	ERJ6GEYJ182	M 1.8KOHM,J,1/10W
R1132	ERJ6GEYJ101	M 100OHM,J,1/10W
R1140	ERJ6GEYJ101	M 100OHM,J,1/10W
R1141	ERJ6GEYJ101	M 100OHM,J,1/10W
R1143	ERD25TJ101	C 100OHM, J,1/4W
R1145	ERJ6GEYJ222	M 2.2KOHM,J,1/10W
R1146	ERJ6GEYJ103	M 10KOHM,J,1/10W
R1147	ERJ6GEYJ122	M 1.2KOHM,J,1/10W
R1150	ERJ6GEYJ182	M 1.8KOHM,J,1/10W
R1151	ERJ6GEYJ562	M 5.6KOHM,J,1/10W
R1152	ERJ6GEYJ562	M 5.6KOHM,J,1/10W
R1153	ERJ6GEYJ562	M 5.6KOHM,J,1/10W
R1154	ERJ6GEYJ122	M 1.2KOHM,J,1/10W
R1155	ERJ6GEYJ183	M 18KOHM,J,1/10W
R1156	ERD25TJ102	C 1KOHM, J,1/4W
R1157	ERJ6GEYJ101	M 100OHM,J,1/10W
R1158	ERJ6GEYJ101	M 100OHM,J,1/10W
R1160	ERJ6GEYJ683	M 68KOHM,J,1/10W
R1161	ERJ6GEYJ223	M 22KOHM,J,1/10W
R1162	ERJ6ENF1243	M 124KOHM, 1/10W MTV
R1163	ERJ6GEYJ122	M 1.2KOHM,J,1/10W
R1164	ERJ6GEYJ682	M 6.8KOHM,J,1/10W
R1170	ERJ6GEYJ560	M 56OHM,J,1/10W
R1171	ERJ6GEYJ560	M 56OHM,J,1/10W
R1172	ERJ6GEYJ332	M 3.3KOHM,J,1/10W
R1173	ERJ6GEYJ332	M 3.3KOHM,J,1/10W
R1174	ERDS2TJ470	C 47OHM, J,1/4W
R1180	ERG3ANJ153H	M 15KOHM, J, 3W MTV
R1181	ERJ6GEYJ100	M 10OHM,J,1/10W
R1182	ERJ6GEYJ100	M 10OHM,J,1/10W
R1183	ERJ6GEYJ101	M 100OHM,J,1/10W
R1184	ERJ6GEYJ101	M 100OHM,J,1/10W
R1185	ERJ6GEYJ100	M 10OHM,J,1/10W
R1187	ERJ6GEYJ102	M 1KOHM,J,1/10W
R1188	ERJ6GEYJ103	M 10KOHM,J,1/10W
R1189	ERJ6GEYJ123	M 12KOHM,J,1/10W
R1190	ERJ6GEYJ103	M 10KOHM,J,1/10W
R1191	ERJ6GEYJ103	M 10KOHM,J,1/10W

Ref.No.	Part No.	Description
R1192	ERJ6GEYJ103	M 10KOHM,J,1/10W
R2301	ERJ6GEYJ562	M 5.6KOHM,J,1/10W
R2302	ERDS2TJ182	C 1.8KOHM, J,1/4W
R2304	ERDS2TJ222	C 2.2KOHM, J,1/4W
R2310	ERDS2TJ1R0	C 1OHM, J,1/4W
R2311	ERQ2CJP8R2S	F 8.2OHM, J, 2W
R3001	ERJ6GEYJ332	M 3.3KOHM,J,1/10W
R3002	ERJ6GEYJ123	M 12KOHM,J,1/10W
R3003	ERJ6GEYJ101	M 100OHM,J,1/10W
R3004	ERJ6GEYJ391	M 390OHM,J,1/10W
R3005	ERJ6GEYJ680	M 68OHM,J,1/10W
R3006	ERJ6GEYJ103	M 10KOHM,J,1/10W
R3010	ERJ6GEYJ101	M 100OHM,J,1/10W
R3011	ERJ6GEYJ393	M 39KOHM,J,1/10W
R3502	ERJ6GEYJ102	M 1KOHM,J,1/10W
R3503	ERJ6GEYJ332	M 3.3KOHM,J,1/10W
R3504	ERJ6GEY0R00	M 0OHM,J,1/10W
R3505	ERJ6GEYJ271	M 270OHM,J,1/10W
R3506	ERJ6GEYJ271	M 270OHM,J,1/10W
R3507	ERJ6GEY0R00	M 0OHM,J,1/10W
R3508	ERJ6GEY0R00	M 0OHM,J,1/10W
R3510	ERJ6GEY0R00	M 0OHM,J,1/10W
R3512	ERJ6GEY0R00	M 0OHM,J,1/10W
R3516	ERJ6GEYJ103	M 10KOHM,J,1/10W
R3517	ERJ6GEY0R00	M 0OHM,J,1/10W
R3518	ERJ6GEY0R00	M 0OHM,J,1/10W
R3521	ERJ6GEYJ153	M 15KOHM,J,1/10W
R3522	ERJ6GEYJ101	M 100OHM,J,1/10W
R3523	ERJ6GEYJ101	M 100OHM,J,1/10W
R3524	ERJ6GEYJ182	M 1.8KOHM,J,1/10W
R3525	ERJ6GEYJ470	M 47OHM,J,1/10W
R3526	ERJ6GEYJ470	M 47OHM,J,1/10W
R3527	ERJ6GEYJ470	M 47OHM,J,1/10W
R3529	ERJ6GEYJ222	M 2.2KOHM,J,1/10W
R3534	ERJ6GEYJ181	M 180OHM,J,1/10W
R3535	ERJ6GEYJ181	M 180OHM,J,1/10W
R3536	ERJ6GEYJ181	M 180OHM,J,1/10W
R3537	ERJ6GEYJ102	M 1KOHM,J,1/10W
R3538	ERJ6GEYJ681	M 680OHM,J,1/10W
R3539	ERJ6GEY0R00	M 0OHM,J,1/10W
R3540	ERJ6GEY0R00	M 0OHM,J,1/10W
R3541	ERJ6GEY0R00	M 0OHM,J,1/10W
R3542	ERJ6GEY0R00	M 0OHM,J,1/10W
R3543	ERJ6GEY0R00	M 0OHM,J,1/10W
R3546	ERJ6GEYJ101	M 100OHM,J,1/10W
R3547	ERJ6GEYJ101	M 100OHM,J,1/10W
R3548	ERJ6GEYJ101	M 100OHM,J,1/10W
R3549	ERJ6GEYJ101	M 100OHM,J,1/10W
R3550	ERJ6GEYJ101	M 100OHM,J,1/10W

Ref.No.	Part No.	Description
R3551	ERJ6GEYJ101	M 100OHM,J,1/10W
R3552	ERJ6GEYJ101	M 100OHM,J,1/10W
R3553	ERJ6GEYJ221	M 220OHM,J,1/10W
R3554	ERJ6GEYJ103	M 10KOHM,J,1/10W
R3555	ERJ6GEYJ153	M 15KOHM,J,1/10W
R3556	ERJ6GEYJ223	M 22KOHM,J,1/10W
R3557	ERJ6GEYJ221	M 220OHM,J,1/10W
R3558	ERJ6GEYJ682	M 6.8KOHM,J,1/10W
R3559	EBJ6GEYJ222	M 2.2KOHM,J,1/10W
R3560	ERJ6GEYJ222	M 2.2KOHM,J,1/10W
R3561	ERJ6GEYJ103	M 10KOHM,J,1/10W
R3562	ERJ6GEYJ472	M 4.7KOHM,J,1/10W
R3563	ERJ6GEYJ222	M 2.2KOHM,J,1/10W
R3564	ERJ6GEYJ561	M 560OHM,J,1/10W
R3565	ERJ6GEYJ682	M 6.8KOHM,J,1/10W
R3566	ERDS2TJ271	C 270OHM, J,1/4W
R3571	ERJ6GEYJ103	M 10KOHM,J,1/10W
R3572	ERJ6GEYJ103	M 10KOHM,J,1/10W
R35151	EVNDCAA03B24	CONTROL 20KOHMB MTV
	CAPACITORS	
C101	ECA1HM2R2G	E 2.2UF, 50V
C102	ECQV1H334JM	P 0.33UF, J, 50V
C103	ECA1HM2R2G	E 2.2UF, 50V
C104	ECA1HM3R3G	E 3.3UF, 50V
C105	ECA1HM2R2G	E 2.2UF, 50V
C107	ECA1CM100G	E 10UF, 16V
C108	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C110	ECA1CM100G	E 10UF, 16V
C122	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C124	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C125	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C126	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C127	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C128	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C150	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C151	ECA1HM010G	E 1UF, 50V
C152	ECA1HMR22G	E 0.22UF, 50V
C155	ECA1CM470G	E 47UF, 16V
C156	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C159	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C160	ECA1HM100G	E 10UF, 50V
C161	ECUX1E104ZFX	C 0.1UF, Z, 25V MTV
C163	ECUX1H104ZFX	C 0.1UF, Z, 50V
C165	ECUX1H101JCX	C 100PF, J, 50V
C168	ECA1HMR33G	E 0.33UF, 50V MTV
C169	ECUX1H221JCX	C 220PF, J, 50V MTV
C201	ECUX1C683KBX	P 0.068UF, K, 16V MTV
C202	ECA1HM3R3G	E 3.3UF, 50V
C203	ECA1CM100G	E 10UF, 16V

Ref.No.	Part No.	Description
C204	ECUX1H222KBN	C 2200PF, K,50V MTV
C211	ECEA1HN010S	E 1UF, 50V
C240	ECUX1H560JCX	C 56PF, J, 50V
C241	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C350	ECCF1H331J	C 330PF, J, 50V
C351	ECCF1H561J	C 560PF, J, 50V
C352	ECCF1H471J	C 470PF, J, 50V
C353	ECCF1H561J	C 560PF, J, 50V
C354	ECKD3D821KBN	C 820PF, K, 2KV MTV
C356	ECKD2H103PU	C 0.01UF, P,500V
C357	ECQM4223JZ	P 0.022UF, J,400V
C390	ECA1CM221G	E 220UF, 16V
C401	ECA1VM102G	E 1000UF, 35V
C402	ECA1VM101G	E 100UF, 35V
C403	ECA1VM222G	E 2200UF, 35V
C405	ECUX1H102KBX	C 1000PF, K, 50V
C406	ECUX1H102KBX	C 1000PF, K, 50V
C410	ECA1HMR22G	E 0.22UF, 50V
C420	ECUX1E104KBX	C 0.1UF, K, 25V MTV
C425	ECSF1EE105V	T 1UF, 25V MTV
C430	ECUX1H103KBX	C 0.01UF, K, 50V
C431	ECA1HM2R2G	E 2.2UF, 50V
C451	ECQE1224KF3	P 0.22UF, K,100V MTV
C452	ECA1VM101G	E 100UF, 35V
C453	ECQB1682KF3	P 0.68UF, K,100V MTV
C501	ECA1HM0R1G	E 0.1UF, 50V
C503	ECKD2H471KB2	C 470PF, K,500V
C504	ECKD2H471KB2	C 470PF, K,500V
C505	ECKD2H561KB2	C 560PF, K,500V
C506	ECEA2EU220	E 22UF, 250V
C507	ECA1EM471G	E 470UF, 25V
C508	ECA1VM332G	E 3300UF, 35V
C510	ECA1AM470G	E 47UF, 10V
C519	ECUX1H330JCX	C 33PF, J, 50V MTV
C520	ECA1HM010G	E 1UF, 50V
C521	ECUX1H103KBG	C 0.01UF, K, 50V MTV
C522	ECQB1H822JF	P 8200PF, J, 50V
C525	ECA1HM3R3G	E 3.3UF, 50V
C526	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C530	ECUX1H122KBN	C 1200PF, K, 50V
C531	ECA1HM010G	E 1UF, 50V
C543	ECA1CM221G	E 220UF, 16V
C546	ECA1HM010G	E 1UF, 50V
C548	ECQB1H473JF	P 0.047UF, J, 50V
C551	ECKD3D471JBP	C 470PF, J, 2KV MTV
C552	ECWH12H153JS	P 0.015UF,J,1.2KV
C553	ECQM4473JZ	P 0.047UF, J,400V
C555	ECQM4273JZ	P 0.027UF, 400V
C558	ECKD3D272JBP	C 2700PF, J, 2KV VTV

Ref.No.	Part No.	Description
C559	TAC7A2D824JC	P 0.82UF, J,200V MTV
C560	TAC7A2D474JC	P 0.47UF, J,200V MTV
C580	ECA1AM330B	E 33UF, 10V MTV
C581	ECA1JM100B	E 10UF, 63V MTV
C582	ECA1HM010G	E 1UF, 50V
C585	ECUX1H104ZFX	C 0.1UF, Z, 50V
C590	ECA1VM101G	E 100UF, 35V
C591	ECKD2H331KB2	C 330PF, K,500V
C601	ECA1HMR22G	E 0.22UF, 50V
C604	ECUX1H680JCX	C 68PF, J, 50V
C605	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C606	ECA1CM470G	E 47UF, 16V
C610	EEUFA1A102B	E 1000UF, 10V MTV
C611	ECUX1E104ZFX	C 0.1UF, Z, 25V MTV
C612	ECUX1E104ZFX	C 0.1UF, Z, 25V MTV
C613	ECUX1E104ZFX	C 0.1UF, Z, 25V MTV
C615	ECA0JM101G	E 100UF, 6.3V
C616	ECUX1H223ZFX	C 0.022UF, Z, 50V
C620	ECUX1H223KBX	C 0.022UF, K, 50V
C621	ECUX1H223KBX	C 0.022UF, K, 50V
C622	ECUX1C224KBX	P 0.22UF, K, 16V MTV
C625	ECUX1H220JCX	C 22PF, J, 50V MTV
C626	ECUX1E104KBX	C 0.1UF, K, 25V MTV
C627	ECA1HMR47G	E 0.47UF, 50V
C628	ECUX1H153KBX	C 0.015UF, K, 50V
C630	ECUX1H120JCX	C 12PF, J, 50V
C633	ECA1AM221G	E 220UF, 10V
C634	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C636	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C637	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C640	ECUX1H330JCX	C 33PF, J, 50V MTV
C641	ECUX1H330JCX	C 33PF, J, 50V MTV
C642	ECUX1H330JCX	C 33PF, J, 50V MTV
C671	ECA1HM470G	E 47UF, 50V
C672	ECUX1H223ZFX	C 0.022UF, Z, 50V
C673	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C674	ECQV1H105JM	P 1UF, 50V
C675	ECQV1H224JM	P 0.22UF, J, 50V
C677	ECUX1H560JCX	C 56PF, J, 50V
C678	ECUX1H390JCX	C 39PF, J, 50V
C801	ECQU2A224MN	P 0.22UF, M,250V ⚠
C802	ECQU2A104MN	P 0.1UF, M,250V ⚠
C803	ECKCNA471MBB	C 470PF, M, ⚠
C805	ECKD2H103PU	C 0.01UF, P,500V
C806	ECKD2H472KB2	C 4700PF, K,500V
C807	ECKD2H472KB2	C 4700PF, K,500V
C808	ECKD2H472KB2	C 4700PF, K,500V
C809	ECKD2H472KB2	C 4700PF, K,500V

Ref.No.	Part No.	Description
C810	ECOS2GP331DB	E 330UF, 400V MTV
C814	ECKD3D102KBP	C 1000PF, K, 2KV
C815	ECQV1H224JM	P 0.22UF, J, 50V
C816	ECQB1H333JF	P 0.033UF, J, 50V
C817	ECQB1H473JF	P 0.047UF, J, 50V
C818	ECA1AM101G	E 100UF, 10V
C820	ECQB1H223JF	P 0.022UF, J, 50V
C821	ECQB1H273JF	P 0.027UF, J, 50V
C822	ECKD3D821KBP	C 820PF, K, 2KV
C823	ECOS2CA102CB	E 1000UF, 160V MTV
C824	ECKD3D821KBP	C 820PF, K, 2KV
C825	ECKD3D102KBP	C 1000PF, K, 2KV
C828	ECA1EM331B	E 330UF, 25V MTV
C829	ECA1CM101G	E 100UF, 16V
C830	ECA0JM101G	E 100UF, 6.3V
C831	ECA160V33UE	E 33UF, 160V MTV
C840	ECKCNA222MEB	C 2200PF, M, ⚠
C850	ECA1EHG102	E 1000UF, 25V MTV
C851	ECKD2H471KB2	C 470PF, K,500V
C852	ECKD3A471KBP	C 470PF, K, 1KV
C853	ECA1HHG471	E 470UF, 50V MTV
C854	ECA1CM100G	E 10UF, 16V
C858	ECQB1H473JF	P 0.047UF, J, 50V
C870	ECA1VM101G	E 100UF, 35V
C871	ECA0JM101G	E 100UF, 6.3V
C1051	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C1052	ECA1AM221G	E 220UF, 10V
C1053	ECUX1H101JRX	C 100PF, J, 50V
C1101	ECUX1H471JCX	C 470PF, J, 50V
C1102	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C1103	ECUX1H563KBX	C 0.056UF, K, 50V MTV
C1106	ECA1HM2R2G	E 2.2UF, 50V
C1120	ECA1CM100G	E 10UF, 16V
C1125	ECA1HM2R2G	E 2.2UF, 50V
C1130	ECA1HM4R7G	E 4.7UF, 50V
C1131	ECA1CM470G	E 47UF, 16V
C1135	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C1137	ECA1CM220G	E 22UF, 16V
C1138	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C1145	ECUX1H681JCX	C 680PF, J, 50V
C1146	ECUX1H101JCX	C 100PF, J, 50V
C1150	ECUX1H151JCX	C 150PF, J, 50V MTV
C1154	ECUX1H820JCX	C 82PF, J, 50V
C1155	ECUX1H221JCX	C 220PF, J, 50V MTV
C1156	ECUX1H102JCX	C 1000PF, J, 50V
C1157	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C1160	ECA1CM471G	E 470UF, 16V
C1161	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C1170	ECUX1H101JCX	C 100PF, J, 50V

Ref.No.	Part No.	Description
C1171	ECUX1H101JCX	C 100PF, J, 50V
C1172	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C1173	ECA1CM100G	E 10UF, 16V
C1180	ECA1CM470G	E 47UF, 16V
C1181	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C1182	ECA1HM330G	E 33UF, 50V
C1183	ECQV1H474JM	P 0.47UF, J, 50V
C1184	ECQV1H474JM	P 0.47UF, J, 50V
C2301	ECUX1H103KBX	C 0.01UF, K, 50V
C2302	ECA1CM100G	E 10UF, 16V
C2305	ECA1CM100G	E 10UF, 16V
C2306	ECA1CM470G	E 47UF, 16V
C2307	ECA1EM222G	E 2200UF, 25V
C2308	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C2309	ECA1EM471G	E 470UF, 25V
C2310	ECQV1H224JM	P 0.22UF, J, 50V
C2311	ECQV1H224JM	P 0.22UF, J, 50V
C2312	ECA1VM470G	E 47UF, 35V
C3001	ECA1CM470G	E 47UF, 16V
C3002	ECUX1H471JCX	C 470PF, J, 50V
C3003	ECA1CM471G	E 470UF, 16V
C3501	ECA1CM470G	E 47UF, 16V
C3502	ECUX1H104ZFW	C 0.1UF, Z, 50V MTV
C3503	ECUX1H223ZFX	C 0.022UF, Z, 50V
C3504	ECUX1H270JCG	C 27PF, J, 50V
C3505	ECUX1H330JCX	C 33PF, J, 50V MTV
C3506	ECUX1H270JCG	C 27PF, J, 50V
C3507	ECUX1H330JCX	C 33PF, J, 50V MTV
C3513	ECUX1H104ZFW	C 0.1UF, Z, 50V MTV
C3514	ECA1CM470G	E 47UF, 16V
C3518	ECA1HM2R2G	E 2.2UF, 50V
C3519	ECEA1AN221S	E 220UF, 10V
C3523	ECUX1H104ZFW	C 0.1UF, Z, 50V MTV
C3524	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C3526	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C3527	ECA1CM221G	E 220UF, 16V
C3534	ECA1HM101G	E 100UF, 50V
C3535	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C3539	ECA1HM100G	E 10UF, 50V
C3544	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C3545	ECUX1H223ZFX	C 0.022UF, Z, 50V
C3560	ECA1CM221G	E 220UF, 16V
C3561	ECUX1H103ZFX	C 0.01UF, Z, 50V MTV
C3562	ECEA1AN221S	E 220UF, 10V
C3563	ECUX1H470JRX	C 47PF, J, 50V MTV
	COILS	
L121	TLXR56MD01	PEAKING COIL MTV
L122	TLT082K991K	PEAKING COIL 8.2U
L140	TLT180K991K	PEAKING COIL 18U

Ref.No.	Part No.	Description
L141	TLT100K991K	PEAKING COIL 10U
L142	TLT180K991K	PEAKING COIL 18U
L143	TLT180K991K	PEAKING COIL 18U
L150	TLT101K991K	PEAKING COIL 100U
L167	EQV7EN212P	COIL MTV
L240	TLT100K991K	PEAKING COIL 10U
L401	EXCELSA39V	BEAD CORE MTV
L402	EXCELSA35T	BEAD CORE MTV
L501	EXCELSA35T	BEAD CORE MTV
L551	TSC925-4	CHOKE COIL
L552	TSK1002	COIL
L553	ELH5L713	COIL MTV
L554	LHL08TB682J	CHOKE COIL MTV
L555	EXCELSA39V	BEAD CORE MTV
L556	EXCELSA35T	BEAD CORE MTV
L580	EXCELSA39V	BEAD CORE MTV
L611	EXCELSR35T	BEAD CORE MTV
L612	TLTR47M991K	PEAKING COIL
L620	EXCELSA39V	BEAD CORE MTV
L640	TLUABTA100	PEAKING COIL MTV
L641	TLUABTA100	PEAKING COIL MTV
L642	TLUABTA100	PEAKING COIL MTV
L649	TLUABTA3R3	PEAKING COIL MTV
L675	TLT220K991K	PEAKING COIL 22U
L801	ELF18D666P	LINE FILTER MTV
L810	TSK1002	COIL
L850	EXCELSA35T	BEAD CORE MTV
L870	EXCELSR35T	BEAD CORE MTV
L1101	TLUABTA100	PEAKING COIL MTV
L1102	TLUABTA100	PEAKING COIL MTV
L1104	TLUABTA100	PEAKING COIL MTV
L1135	TLUABTA100	PEAKING COIL MTV
L1140	TLUABTA100	PEAKING COIL MTV
L1150	TLUABTA100	PEAKING COIL MTV
L1151	TLUABTA100	PEAKING COIL MTV
L1152	EXCELDR25V	CORE MTV
L3501	TLTACC100K	PEAKING COIL 10U
L3503	TLTACC100K	PEAKING COIL 10U
L3504	TLTACC100K	PEAKING COIL 10U
L3505	TLTACC100K	PEAKING COIL 10U
	TRANSFORMERS	
T501	ZTFK82003A	FLYBACK TRANS MTV ⚠
T550	TLH15462M	COIL
TA801	ETS29AK286NC	SWITCHING TRANS MTV ⚠
	DIODES	
D101	MA165	DIODE
D120	MA858	DIODE
D391	MA165	DIODE
D392	MA165	DIODE

Ref.No.	Part No.	Description	
D393	MA165	DIODE	
D394	MA165	DIODE	
D401	ERA15-01	DIODE	
D402	MA4360M	DIODE	
D403	MTZJ4.7C	ZENER DIODE	
D404	MA165	DIODE	
D501	TVSEU2	DIODE	
D502	TVSEU2	DIODE	
D503	TVSEU2	DIODE	
D504	MTZJ36A	ZENER DIODE	MTV
D510	TVSEU2	DIODE	
D512	MTZJ5.6A	ZENER DIODE	MTV
D517	MTZJ10D	ZENER DIODE	MTV
D545	MA171	DIODE	
D551	ERB06-15	DIODE	
D552	TVSRU2AM	DIODE	
D580	D1NL20UV70	DIODE	MTV
D581	MTZJ36D	ZENER DIODE	
D590	MA4108J	DIODE	
D591	MA171	DIODE	
D653	MA165	DIODE	
D801	TAP4GA0003	POSISTOR	MTV
D802	D4SB80Z	DIODE	
D803	MTZJ12C	ZENER DIODE	MTV
D804	D1NL20UV70	DIODE	MTV
D805	MTZJ15C	ZENER DIODE	
D806	MTZJ5.1C	ZENER DIODE	MTV
D815	D1NL20UV70	DIODE	MTV
D816	D1NL20UV70	DIODE	MTV
D817	S2L60V61	DIODE	MTV
D820	TVSSR2KS	DIODE	
D821	0N3131LF	PHOTO COUPLER	MTV
D840	PC123F2	DIODE	
D850	D1NL20UV70	DIODE	MTV
D851	MTZJ2.4B	ZENER DIODE	
D852	EU02	DIODE	
D853	MTZJ8.2C	ZENER DIODE	
D854	MA27T-A	DIODE	
D870	D1NL20UV70	DIODE	MTV
D871	MTZJ5.6C	ZENER DIODE	MTV
D1051	EL333ID-F45R	LED	MTV
D1120	MA165	DIODE	
D1145	MA165	DIODE	
D1160	MTZJ5.6A	ZENER DIODE	MTV
D1170	MTZJ6.8C	ZENER DIODE	
D1171	MTZJ6.8C	ZENER DIODE	
D3503	MA165	DIODE	
	INTEGRATED CIRCUITS		
IC140	TVSTC4052BP	C-MOS LOGIC IC	

Ref.No.	Part No.	Description	
IC401	LA7840	IC	MTV
IC601	M52770SP	LINEAR IC	MTV
IC670	AN5637	LINEAR IC	MTV
IC801	SE090N	IC	
IC850	AN78M05LB	LINEAR IC	MTV
IC851	AN78M09LB	LINEAR IC	MTV
IC852	AN78M05LB	LINEAR IC	MTV
IC1051	GP1U282Q	REMOCON RECEIVER	
IC1101	MN1871681T7R	MOS IC	MTV
IC1102	24C04AIPA21	MOS IC (EEPROM 4KBIT)	
IC1103	S-80741AL-Z	LINEAR IC	
IC1105	BA225	IC	MTV
IC1180	AN5071	LINEAR IC	
IC2301	LA4289	IC	MTV
IC3501	CF72416	IC	MTV
IC3502	CF70209NW	IC	MTV
IC3503	MN1280R	IC (MOS IC)	
IC3505	TC4066BFN	IC	MTV
IC3506	TC4066BFN	IC	MTV
	TRANSISTORS		
Q101	2SD601ATX	TRANSISTOR	MTV
Q120	2SD601ATX	TRANSISTOR	MTV
Q121	2SC2188	TRANSISTOR	
Q140	2SD601ATX	TRANSISTOR	MTV
Q160	2SB709ATX	TRANSISTOR	MTV
Q161	2SB709ATX	TRANSISTOR	MTV
Q351	2SC2258	TRANSISTOR	
Q352	2SC2258	TRANSISTOR	
Q354	2SC2258	TRANSISTOR	
Q390	2SA564A-R	TRANSISTOR	
Q401	2SD601ATX	TRANSISTOR	MTV
Q548	2SD601ATX	TRANSISTOR	MTV
Q549	2SD1275A	TRANSISTOR	
Q551	2SD2499	TRANSISTOR	MTV
Q580	2SB709ATX	TRANSISTOR	MTV
Q581	2SB709ATX	TRANSISTOR	MTV
Q670	2SD601ATX	TRANSISTOR	MTV
Q671	2SD601ATX	TRANSISTOR	MTV
Q801	2SC5241	TRANSISTOR	MTV
Q802	2SD789ETZ	TRANSISTOR	MTV
Q803	2SD789ETZ	TRANSISTOR	MTV
Q804	2SC2785H-T	TRANSISTOR	MTV
Q850	2SC2785H-T	TRANSISTOR	MTV
Q851	2SC2785H-T	TRANSISTOR	MTV
Q852	2SD1275A	TRANSISTOR	
Q1130	2SD601ATX	TRANSISTOR	MTV
Q1145	2SD601ATX	TRANSISTOR	MTV
Q1150	2SD601ATX	TRANSISTOR	MTV
Q1180	2SD601ATX	TRANSISTOR	MTV

Ref.No.	Part No.	Description
Q2301	2SB709ATX	TRANSISTOR MTV
Q3001	2SD601ATX	TRANSISTOR MTV
Q3503	2SD601ATX	TRANSISTOR MTV
Q3504	2SD601ATX	TRANSISTOR MTV
Q3505	2SD601ATX	TRANSISTOR MTV
Q3506	2SB709ATX	TRANSISTOR MTV
Q3507	2SD601ATX	TRANSISTOR MTV
Q3508	2SD601ATX	TRANSISTOR MTV
Q3509	2SA564A-R	TRANSISTOR
	OTHERS	
E32	TJS1A9780	5P CONNECTOR
E.22	TJS3A9650	CONNECTOR MTV
E.33	TJS3A9650	CONNECTOR MTV
F801	XBA2C31TR0	FUSE 250V 3.15A ⚠
J212	EXCELSA35T	BEAD CORE MTV
J273	TSK1002	COIL
J277	EXCELSA35T	BEAD CORE MTV
J343	EXCELSA39V	BEAD CORE MTV
JA5	ERJ6GEY0R00	M 0OHM,J,1/10W
JA6	ERJ6GEY0R00	M 0OHM,J,1/10W
JA11	ERJ6GEY0R00	M 0OHM,J,1/10W
JA12	ERJ6GEY0R00	M 0OHM,J,1/10W
JA13	ERJ6GEY0R00	M 0OHM,J,1/10W
JA14	ERJ6GEY0R00	M 0OHM,J,1/10W
JA15	ERJ6GEY0R00	M 0OHM,J,1/10W
JA16	ERJ6GEY0R00	M 0OHM,J,1/10W
JA17	ERJ6GEY0R00	M 0OHM,J,1/10W
JA20	ERJ6GEY0R00	M 0OHM,J,1/10W
JA21	ERJ6GEY0R00	M 0OHM,J,1/10W
JA22	ERJ6GEY0R00	M 0OHM,J,1/10W
JA30	ERJ6GEY0R00	M 0OHM,J,1/10W
JA.1	ERJ6GEY0R00	M 0OHM,J,1/10W
JA.2	ERJ6GEY0R00	M 0OHM,J,1/10W
JA.3	ERJ6GEY0R00	M 0OHM,J,1/10W
JA.5	ERJ6GEY0R00	M 0OHM,J,1/10W
JA.6	ERJ6GEY0R00	M 0OHM,J,1/10W
JA.7	ERJ6GEY0R00	M 0OHM,J,1/10W
JA.9	ERJ6GEY0R00	M 0OHM,J,1/10W
JK.1	TJB4G605	FRONT AV TERMINAL MTV
JK.2	TJB18637	AV TERMINAL
JK.21	TJS1A5050	CRT SOCKET ⚠
JS672	ERJ6GEY0R00	M 0OHM,J,1/10W
JS1053	ERJ6GEY0R00	M 0OHM,J,1/10W
JS1120	ERJ6GEY0R00	M 0OHM,J,1/10W
S801	ESB91232A	SWITCH ⚠
S1101	EVQ21405R	SWITCH
S1102	EVQ21405R	SWITCH
S1103	EVQ21405R	SWITCH
S1104	EVQ21405R	SWITCH

Ref.No.	Part No.	Description
S1105	EVQ21405R	SWITCH
S1106	EVQ21405R	SWITCH
T.8	6059B14Z	CONNECTOR MTV
T.9	6059B18Z	CONNECTOR MTV
TNR1	ENV59D22F1	TUNER MTV ⚠
W-E32	TJS2A8340	CONNECTOR
W-Y32	TJS3A9660	CONNECTOR MTV
X120	K6267K	SAW FILTER MTV
X140	EFCS4R5MW5	CERAMIC FILTER
X141	EFCS5M7MW3	CERAMIC FILTER
X142	EFCS6R5MW5	CERAMIC FILTER
X143	EFCS6R0MW5	CERAMIC FILTER
X240	EFCS6R5MS5	CERAMIC FILTER MTV
X241	EFCS4R5MS5	FILTER MTV
X242	EFCS6R0MS5	CERAMIC FILTER
X243	EFCS5R5MS5	CERAMIC FILTER
X520	TAFCSB503F18	CERAMIC RESONATOR MTV
X625	TS816M32T	CRYSTAL OSC MTV
X626	TSS4GA001T	CRYSTAL OSCILLATOR MTV
X1160	EF0EC1205B4	CERAMIC RESONATOR
X3501	TSS2004-M	CRYSTAL
Y.32	TJS3A9660	CONNECTOR MTV
Y.33	TJS3A9650	CONNECTOR MTV

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